DOCUMENT RESUME

ED 227 023 SO 014 523

AUTHOR	Cwi, David, Ed.
TITLE	Research in the Arts: Proceedings of the Conference on Policy Related Studies of the National Endowment for the Arts (Baltimore, Maryland, December 7-9, 1977).
INSTITUTION	Skidmore, Owings & Merrill, Inc., Boston, MA.
SPONS AGENCY	National Endowment for the Arts, Washington, D.C.
PUB DATE	78
NOTE	102p.; Not available in paper copy due to small print.
PUB TYPE	Collected Works - Conference Proceedings (021) -- Reports - Research/Technical (143)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Art Appreciation; Artists; Audiences; Craft Workers; Cultural Centers; Economic Research; Economic Status; Employment; *Fine Arts; Institutions; Leadership; Orchestras; Policy Formation; Research Problems; Theaters
IDENTIFIERS	Econometrics

ABSTRACT

Summaries are presented of arts research projects and of conference workshops which reviewed the projects. These provide an important stock-taking of currently available data on the arts and review a variety of issues involved in improving the present situation. There are four major sections. The first section presents research on the artistic and cultural consumers, including a study of theatre and symphony in four southern cities, a behavioral approach for assessing the demand for cultural and artistic recreational activities, and policy uses of audience studies. The second section deals with research and public policy. Research on artistic and cultural institutions is the focus of the third section. Econometric models, ways to forecast the economic condition of the arts, and the development of museum management tools are among the topics studied. The final section presents research on the American artist and craftsman. Craft-artists and their organizations, training and career experiences of symphony orchestra musicians, the need for musical and administrative leadership of American orchestras, and characteristics of American artists are studied. A brief assessment of the conference concludes the report. (RM)

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Research in the Arts

Proceedings of the Conference on Policy Related Studies of the National Endowment for the Arts

The Walters Art Gallery
Baltimore, Maryland
December 7-9, 1977

Editor
David Cwi

SP 014 523

sponsored by the Walters Art Gallery in cooperation with
The Johns Hopkins University Center for Metropolitan Planning and Research

Table of Contents

INTRODUCTION 5

SYMPOSIUM ON GOVERNMENTAL ARTS RESEARCH IN OTHER COUNTRIES 7

RESEARCH ON THE ARTISTIC AND CULTURAL CONSUMERS

DEVELOPING RESEARCH ON THE ARTS CONSUMER
Richard J. Orend 10

CONSUMER RESPONSE TO ARTS OFFERINGS: A STUDY OF THEATRE AND SYMPHONY IN FOUR SOUTHERN CITIES
Alan R. Andreasen and Russell W. Belk 13

A BEHAVIORAL APPROACH FOR ASSESSING THE DEMAND FOR CULTURAL AND ARTISTIC RECREATIONAL ACTIVITIES
George L. Peterson and Alex Anas 20

HOW BROADCASTERS ASSESS THE RESPONSE TO PROGRAM OFFERINGS
Natan Katzman 23

WORKSHOP: ESTIMATING CONSUMER DEMAND 26

THE POLICY USES OF AUDIENCE STUDIES
David Cwi 27

A CRITICAL REVIEW OF THE CONTENT, QUALITY AND USE OF AUDIENCE STUDIES
Michael Useem and Paul DiMaggio 30

WORKSHOP TUTORIAL: IMPROVING AUDIENCE STUDIES 33

DINNER PROGRAM: RESEARCH AND PUBLIC POLICY 35

INFORMATION AND POLITICS
The Honorable William Donald Schaefer, Mayor
City of Baltimore

INFORMATION AND POLICY GOALS
The Honorable Clarence D. Long
U.S. House of Representatives

THE POLICY MAKERS' NEED FOR RESEARCH INFORMATION
Livingston L. Biddle, Jr., Chairman
The National Endowment for the Arts

RESEARCH ON ARTISTIC AND CULTURAL INSTITUTIONS

ECONOMIC DATA ON THE ARTS: CURRENT STATUS AND POSSIBLE IMPROVEMENTS
Dick Netzer 40

PROBLEMS AND ISSUES IN THE DEVELOPMENT OF AN ECONOMETRIC MODEL OF THE PERFORMING ARTS
Harry I. Greenfield and Samuel Schwarz 43

USING ECONOMETRIC MODELS TO FORECAST THE IMPACT OF ECONOMIC CONDITIONS ON THE OPERATION OF ARTISTIC AND CULTURAL INSTITUTIONS
Robert T. Deane and Ibrahim A. S. Ibrahim 46

COLLECTION OF USEFUL ECONOMIC DATA IN THE ARTS: SOME ISSUES OF FINANCIAL REPORTING
Joseph Kraemer and Jeffry Baldwin 50

WORKSHOP: EVALUATING DATA SERIES RECOMMENDATIONS FOR FORECASTING THE ECONOMIC CONDITION OF THE ARTS 53

ISSUES IN DEVELOPING A MODEL TO ASSESS THE COMMUNITY-WIDE ECONOMIC EFFECTS OF CULTURAL INSTITUTIONS
David Cwi and Katharine C. Lyall 54

WORKSHOP TUTORIAL: HOW TO ASSESS THE ECONOMIC IMPACT OF ARTS INSTITUTIONS ON THEIR COMMUNITIES 60

STUDIES OF THE CONDITION AND NEEDS OF CULTURAL INSTITUTIONS: THEIR PAST USES AND FUTURE PROSPECTS
Carol Grossman and Eric Larrabee 61

THE ECONOMIC CONDITION OF THE LIVE PROFESSIONAL THEATRE IN AMERICA
Robert J. Anderson, Jr. and Sonia P. Maltezou 63

THE DEVELOPMENT OF MUSEUM MANAGEMENT TOOLS
Barbara Vilker 67

WORKSHOP: EVALUATING THREE APPROACHES TO STUDYING THE CONDITION AND NEEDS OF CULTURAL INSTITUTIONS 69

RESEARCH ON THE AMERICAN ARTIST AND CRAFTSMAN

CHANGES OVER TIME IN ARTISTIC POTENTIAL AND PRODUCTIVITY
Frank Barron 72

PERSPECTIVES ON ASSESSING ACTORS' EMPLOYMENT AND UNEMPLOYMENT: SOME SHORT AND LONG TERM PROBLEMS ON RESEARCH INTO THE ARTS
Philip H. Enni... 76

DESIGNING A STUDY OF CRAFT-ARTISTS AND THEIR ORGANIZATIONS
Constance F. Citro.....80

A PILOT STUDY OF THE TRAINING AND CAREER EXPERIENCES OF SYMPHONY ORCHESTRA MUSICIANS
Donald J. Shetler.....83

ESTIMATING THE NEED FOR MUSICAL AND ADMINISTRATIVE LEADERSHIP OF AMERICAN ORCHESTRAS
Benjamin Fogel.....86

USING CENSUS DATA TO STUDY CHARACTERISTICS OF AMERICAN ARTISTS
John C. Beresford.....90

WORKSHOP: THE STRENGTHS AND WEAKNESSES OF ALTERNATIVE TECHNIQUES FOR STUDYING THE ARTIST AND CRAFTSMAN POPULATION.....97

AN ASSESSMENT OF THIS CONFERENCE: SOME INFORMAL REMARKS
Joseph Coates, Assistant to the Director,
U. S. Congress Office of Technology Assessment.....99

Introduction

In November of 1975, the National Council on the Arts approved the first program budget for the Arts Endowment's Research Division. It was anticipated that research activities would be disseminated and reviewed in a variety of formats including conferences and workshops.

In December of 1977, the Walters Art Gallery, under a grant from the Endowment and with the cooperation of The Johns Hopkins University Center for Metropolitan Planning and Research, sponsored Research in the Arts: A Conference on Policy Related Studies of the National Endowment for the Arts. The conference provided arts researchers, administrators, and working artists with an opportunity to evaluate and inform the Endowment's Research agenda and to take stock of the emerging interdisciplinary field of arts research.

This report contains the conference proceedings. Papers are presented on 19 research projects funded by the Research Division of the Arts Endowment and one study funded by the National Science Foundation. Summaries are presented of conference workshops devoted to reviewing these projects. Taken as a whole, these studies comprise a major component of current policy research on American artistic and cultural institutions, audiences, and artists and craftsmen.

The research presented in this volume is important for several reasons. Some of the projects sought to evaluate the quality, availability and comparability of available data on institutions, audiences, and various occupations in the arts. These provide an important stock-taking of currently available data on the arts and review a variety of issues involved in improving the present situation.

Several of the studies shed new light on previously accepted truths. For example, it has become a commonplace that the performing arts are beset by a congenital "cost-disease" assuring an ever growing reliance on non-box office revenue. This diagnosis was made over a decade ago by Baumol and Bowen in their classic study Performing Arts: The Economic Dilemma.

Research presented at the conference on the more recent experiences of the performing arts suggests that these institutions are more adaptable and resourceful than might have been expected. It has turned out that there may be more room for economizing than first supposed; marketing and management strategies have spread fixed costs and increased ticket income, and contributions have risen dramatically. The data point out the complex economic environment within which the arts function and suggest that some aspects may be more in the control of the arts than has heretofore been appreciated. In this vein, one study has identified management tools similar to those available in other industries that are equally applicable to the arts, while another project suggests that by altering their marketing strategies, arts institutions can significantly increase use by marginal attenders.

Other studies have advanced our understanding of the fundamental roles played by the arts in the life of the community. Projects are included that focus on the economic effects of arts institutions on their local communities, on the range of human needs met by participation in artistic and cultural activities, and on the extent to which young Americans have developed creative and appreciative abilities in the arts.

Through papers and workshops, the conference also sought to illuminate the relationship between arts research and policy development. The proceedings provide insights from the point of view of all participants: the researcher, the decision maker, arts agency staff and working artists and administrators.

The Endowment sponsored research presented at this conference would constitute a major advance if only because it confirms that the arts are "researchable"--that the methods of analysis, prediction, and explanation applicable to other fields apply also to the arts. We can expect that research of the sort reported in this volume will be increasingly important to the development and evaluation of public policy toward the arts.

A number of persons contributed to the development of the conference. Edward P. McCracken, Administrative Officer, the Walters Art Gallery, coordinated physical arrangements, conference registration and related conference elements. David Cwi of the Johns Hopkins University Center for Metropolitan Planning and Research was responsible for the program and proceedings; and Harold Horowitz, Director, Research Division, the National Endowment for the Arts, facilitated the involvement of Endowment sponsored researchers as well as researchers from other countries.

A number of other persons who ought to be acknowledged are cited on the inside cover of this volume. Special thanks are due the several persons who chaired morning sessions or moderated afternoon workshops. Morning sessions were chaired by Eleanor K. Hutzler, Chairman of the Board of Trustees, Maryland Institute College of Art; Richard Sheldon, The Ford Foundation; and James L. Burgess, Chairman, the Maryland State Arts Council. Workshops were moderated by Herbert B. Cahan, Secretary, Maryland State Department of Economic and Community Development; Hugh Southern, Executive Director, Theatre Development Fund; Steve Benedict, The National Endowment for the Arts; Philip S. Jessup, II, the William H. Donner Foundation; and Elliot W. Galkin, Director, Peabody Conservatory, Peabody Institute of The Johns Hopkins University.

In connection with the preparation of the Proceedings volume, the editor would like to express special thanks to Tom Bradshaw of the Endowment's Research Division, and to David Greytak of Syracuse University for serving as reporters for several workshops; to Louie Fringer of The Johns Hopkins University for proofing copy and otherwise correcting the editor; and especially to Victoria Carter who endured the task of typing various drafts as well as correspondence with the authors.

* * *

Editor's Note: While all the papers presented at the conference are included in this proceedings, the editor with the understanding and cooperation of the authors found it necessary to edit all papers due to the immense amount of information presented. In many cases, complete reports on these projects are available from either the authors or the Research Division of the Arts Endowment.

David Cwi
Baltimore, 1978

Symposium on Governmental Arts Research in Other Countries

Moderated by Jack C. Fisher, Director, The Johns Hopkins University, Center for Metropolitan Planning and Research, this symposium was an informal addition to the conference made possible after officials in charge of arts research in several countries indicated that they planned to attend. The informal symposium was devoted to reviewing the governmental arts research programs for which these foreign conferees were responsible. The officials attending the conference were Robert Hutchison, Senior Research and Information Officer, Arts Council of Great Britain; Yvon Ferland, Assistant Director for Cultural Statistics, Statistics Canada; J.R. Thera, Director, Research and Statistics Directorate, Secretary of State, Canada; Andre Garon, Ministry of Cultural Affairs, Quebec, Canada; and Augustin Girard, Head, The Studies and Research Department, Office of the Secretary of State for Culture, France.

Robert Mayer, Executive Director, The New York State Council on the Arts, and P. David Searles, Deputy Chairman for Policy and Planning, The National Endowment for the Arts, joined the panel to lend an American perspective from the standpoint of the state and federal levels.

As noted, three of the panelists were from the Dominion of Canada. Mr. Garon indicated that he had been recently appointed to a newly created position, and reflected on the organization of the research function within the Ministry of Cultural Affairs, Quebec. He indicated the special concerns of his province to further its cultural resources and identity.

Mr. Ferland emphasized that the basic task of his department was the development of appropriate statistics on Canada's cultural life. In this regard, the primary task was to identify the range and magnitude of current activities with respect to production, distribution, and consumption. He cited as one example the field of publishing, in which it would be important to know not only the numbers of writers and publishers, but also facts about the sale and use of books by Canadians. Similar data sets are being generated for other media and art forms. Dr. Ferland emphasized that in Canada the task of assembling statistics is separate from policy, which he referred to as the addition to separate agencies, because political and policy analysis are considered to be the responsibility of the decision-maker, not the researcher.

Mr. Thera related several factors that may complicate the arts research agenda in Canada as compared to the United States. The population in Canada is much smaller, with a large immigrant component. Cultural life is dominated by American products in a country which had no natural identity and is divided by the use of French and English. Further, unlike the United States, there is no established tradition of private and corporate arts support. Mr. Thera noted that research was inseparable from policy in that arguments about policy often hinge on disagreement concerning the facts. He indicated that the broad objectives of the research effort in his agency are to identify and understand the relationship that obtain between all segments of the arts community so as to be in a position to also identify the points at which government could make a contribution to good effect.

Mr. Girard's presentation dealt at length with the practical issues associated with the integration of the research and decision-making or planning functions. Of primary concern was the problem of communications between researchers and decision-makers. Mr. Girard suggested that the two communities neither used their time in the same way nor spoke the same language.

The researcher cannot be hurried in that a serious research effort requires at least 12, and usually, 18 months, with an additional 6 months devoted to publication of the findings. The researcher is primarily interested in the development and testing of hypotheses with the goal of developing a piece of work that will be well reviewed by his peers. The researcher's milieu involves the organization of concepts and findings with the research community in mind, while the decision-maker is in a hurry, in that decisions must be made within two to six months. In addition, the decision-maker is under pressures foreign to the researcher. The decision-maker may not be trained as a scientist and, consequently, will not be able to deal with the researcher's work in its own terms, inasmuch as research is cast in the language of science and builds on past theories and findings. More importantly, research is usually developed without government's decision-making needs in mind and, consequently, is not focused so as to make clear its relevance to decision-making. The

situation is further complicated by the fact that researchers and decision-makers rarely meet.

Mr. Hutchison reported that the Arts Council of Great Britain would shortly embark upon a research program that would focus on four broad areas:

1) Provision of up-to-date statistics and other information to inform decisions on financial priorities;
2) A continuous plan of thorough program evaluation;
3) Research on perennial questions of arts policy; and
4) Research to illuminate new policy issues.

The development of this program would require a significant increase in appropriations for research, with research priorities developed after consultation with the Arts Council's main panels and committees.

Mr. Searles, representing The National Endowment for the Arts, called attention to the fact that the Arts Endowment is intended to be "junior partner" in arts funding, and that it is basically concerned with the professional arts community. Special research questions of interest include what, where and how does the public participate in the arts? What sort of programs should a federal agency like the Arts Endowment adopt to foster quality artistic activities? How do we determine the social and economic impact of the arts and their role in the promotion of non-cultural objectives?

Mr. Mayer, representing the perspective of state arts councils, emphasized the need for research into the public's actual needs and desires with respect to artistic fare in addition to research on current institutional forms and their needs and programs.

Research on the Artistic and Cultural Consumer

Session Chairman:
Eleanor K. Hutzler
Chairman of the Board of Trustees
The Maryland Institute College of Art

Developing Research on the Arts Consumer

Richard J. Orend

We had hoped to be able to present the results of our study of demand for the Arts in the South. Unfortunately, there have been a number of administrative delays (centering around obtaining OMB approval for the study) which precluded gathering the data in time for presentation here.

In lieu of reporting on this research, and in keeping with the purpose of this conference, I believe it is appropriate to discuss in a more general way the criteria which might be applied in evaluating research projects on the "artistic and cultural consumer." My intention is to highlight issues central to the development of a rudimentary model of the research development process which can serve as a guide for both designing and evaluating future research projects.

With respect to designing and evaluating research on the "artistic and cultural consumer," a key question concerns the role of arts agencies, such as the National Endowment for the Arts. Specifically, what role does the agency intend to play in the creation of demand for the arts? Will the agency facilitate existing popular culture, e.g., promote more situation comedies on TV, or create new demand by "educating" the public regarding the traditional "high cultural" institutions in the society, or some combination of the two? The particular goal of the agency will affect the selection of research issues. Thus, an agency with the goal of "giving the people what they want" will focus on general desires in its research and on promoting those desires in its policy decisions. An agency which seeks to preserve traditional high culture institutions will seek research projects which provide support for this goal. Unless the agency first considers its goals, it may initiate research with no prior indication of the potential usefulness of research outcomes. There are also problems for the researchers, who must either substitute their own goals or guess the intentions of the sponsoring agency.

When agencies do not have explicitly defined goals or their goals conflict, the organization of useful research is extremely difficult. The use of research produced under such conditions may be dysfunctional, self-serving for individuals, or, at best, a useless waste of money. And, while researchers may be guilty of many sins in the development of research studies, the absence of such policy direction from the sponsoring agency creates one of the prime conditions for inapplicable and impractical projects.

Once the general policy goals of the agency are made explicit, it will then be possible to focus on alternative research objectives. It is important to note that significant differences in research strategy are applicable under different policy conditions. For example, research aimed at identifying the unprejudiced cultural demands of a given population would use a different strategy than a project which sought to identify ways of increasing support for the local symphony. In the former case, we might sample the entire population and include a wide variety of leisure activity choices in our questionnaire. In the latter, we might focus only on those with some interest or experience with symphonies, and concentrate on ways of increasing participation in a single or limited set of activities.

Subsequent to a clear specification of goals, it is necessary to focus more directly on the policy or decision making needs for which research was initiated. In the case of our own effort, the Endowment raised the general question of demand for artistic and cultural activities in the South. One policy issue involved in this situation centered around how Endowment programs could more effectively meet the needs of the South. This raises the question of the extent of correspondence between Southerners' needs and Endowment programs. What are the most fruitful areas to pursue? From a more open-ended perspective, the Endowment could ask, "Given the distribution of demand for cultural activities, what can the Endowment do to support areas of existing unfulfilled demand?" Underlying each question are basic assumptions about the role of the Endowment as facilitator, about whether the Endowment's function is to promote a broader range of activities or enhance those already determined to be within its scope. The absence of a clear specification of which role was being promoted had implications for the design of our study. Specifically, we adopted a very broad approach which, we felt, could accomodate either policy position.

There is another question which is crucial to the development of research. That is, are we interested

Richard Orend, Senior Scientist, Human Resources Research Organization, Alexandria, Virginia.

in predicting or explaining behavior? In certain instances, the accurate prediction of consumer behavior satisfies policy making requirements and is also a feasible economic research alternative. Attempting prediction rather than explanation tends also to greatly simplify the research problem. It is generally easier to predict behavior than to determine why it happened. Economists have long understood this, and used it to their advantage in developing aggregate models of human economic behavior. The same approach is now being used in numerous consumer models, including the consumption of culture.

While it is generally dissatisfying to me to examine patterns without searching for reasons, decisions on this issue are usually driven by more practical considerations. In our study of Southern consumers, we have compromised on this issue by including both predictive (e.g., previous behavior and attitudes) and potentially explanatory variables (e.g., need patterns, perceptions of need satisfying qualities of different leisure activities, and a total leisure activity context model).

Once organizational and policy goals have been defined and the objectives of the research specified, it is possible to bring to bear relevant theories about the behavior being examined. It is at this point that the researcher function begins to play a dominant role in the development of the study. It is an axiom of social science that research should be conducted in response to a theory about the phenomena being observed. It is a fact of life in policy research that this is seldom the case.

Such theories guide the selection of appropriate and potentially useful variables, suggest the relationship to be found among those variables, guide data analysis, and provide a systematic framework for the acceptance or rejection of results. In the absence of such conceptual guidance, interpretation of empirical results becomes a matter of convenience and statistically significant results become a matter of chance. Given any large set of variables, the chances that two or more will be significantly related are very high. This situation operates to the advantage of the researcher, who can usually find something at which to point with pride in study results. However, a reliable and valid interpretation of such results is often considerably more difficult to develop.

Even in developing research which is aimed only at predicting, an underlying model of behavior patterns is assumed, and the selection of predictor variables can be based on assumptions about related behaviors. Previous empirical results often form the basis of a "grounded" model of behavior in given situations. For example, we have long expected differences in behavior based upon such ascriptive characteristics as sex, age, and race, and on such acquired characteristics as education and income level. Our predictive models are often based on these and similar variables, with some vague ideas about why they are important lurking in the background, waiting to be aired should the empirical results warrant. While such "quickie" explanations are easy to produce, they often seem quite unsatisfying intellectually, and, I think, in the long run do not provide the value obtained from more carefully developed theories.

However, adhering closely to such a rigorous approach can produce certain difficulties for sponsoring agencies. Social science theorizing has not reached such an advanced state that strong positive results can be routinely expected. Further, it is usually a long process to develop, test, modify, and retest a particular approach. Thus, meaningful results are often several expensive research years away from the beginning of a project. This situation can lead to dissatisfaction with results and pressure for quicker turnaround on "useful" information. These conditions breed what has become known as "quick and dirty" research, which leaves no one satisfied and is particularly subject to the negative evaluations of outside agencies as well as to reduced usefulness for policy decisions.

Within the framework of the previous general considerations are more practical questions concerning the selection of subjects, the identification of appropriate variables, and the building of appropriate data collection and evaluation methodologies.

Subject selection depends on research objectives which, as we've seen, are guided by agency goals and program objectives. Using our own study as an example, the objective of identifying overall demand for cultural activities that could be supported by the Endowment's current programs led to the selection of a general population sample. The objective is to be able to generalize to the entire population of the South with some specified degree of accuracy. A more restrictive set of objectives, such as building museum patronage, might call for a different strategy in selecting sample respondents (as well as for a different selection of questions). Audience studies provide useful information about current users, but are a biased sample if our goal were to expand the role of the arts agency into new areas.

Variable selection is, of course, a direct function of research objectives and an associated theoretical model. (Variables are the categories of information collected from consumers about their behavior, attitudes, perceptions, and individual characteristics.) For example, our study is concerned with developing a picture of the relative demand for artistic activities in the South. We determined, therefore, that the context of all leisure activities was appropriate. Accordingly, the questionnaire we developed attempts to collect data on all choices of leisure behavior. Other studies to be described during this conference have used different approaches based on a more limited set of objectives.

Given our model of leisure behavior, we included questions on life style (or more specifically, leisure activity style) and external restrictions (these included cost, location, availability, quality, etc.) Questions representing these variables were included in our questionnaire because they fit our conception of how leisure activity choices are made, and because they will help answer general policy questions about the likelihood of selecting particular artistically oriented leisure activity patterns. In addition, a concern for maximizing the predictive capabilities of our instrument led us to include such straightforward items as likelihood questions.

The final step in our model of the research development process is the design of methods for collecting data and evaluating the results. The most popular technique for gathering consumer related data is to ask the consumer, i.e., conduct a survey. It is, however, far from the only available technique and is often not even the most useful. For example, studies which generate predictive models based on previous behavior might use less obstrusive observational techniques. (Many studies on outdoor recreation have used variations of this approach.) On the other hand, studies which are examining continuous leisure behavior may be best accomplished by using a survey panel or diary technique of some kind (if sufficient funds are available). The particular technique chosen is dependent upon the research objectives and the population and variables of interest.

We have discussed several elements that together

comprise a model of the research development process. These elements include: agency goals and objectives, the application of relevant models of human behavior, the identification of a target population, the selection of useful variables, and the development of appropriate data collection and evaluation methodologies. All of the elements discussed are integrated and the linkages between them are almost always two-way. For example, while theoretical perspective dictates variable selection, the limits in data collection methodology place restrictions on the application of theories. My purpose has not been to specify the nature of each linkage, but rather to provide a more useful means for evaluating individual research projects in both development and post hoc conditions.

Consumer Response to Arts Offerings: A study of theatre and symphony in four Southern cities

Alan R. Andreasen and Russell W. Belk

Introduction

This study was designed to provide insights into how managers of arts and cultural organizations can "...make arts and cultural activities more widely available to millions of Americans."[1] Data were collected on past and likely future attendance at symphony and theater in four Southern cities: Atlanta, Georgia; Menphis, Tennessee; Columbia, South Carolina; and Baton Rouge, Louisiana. Responses to proposed changes in arts offerings were solicited; and these responses, as well as the attendance data, were analyzed using attitude and lifestyle concepts recently introduced into marketing studies in the business sector. This paper will concentrate primarily on the portion of the analysis dealing with future attendance and responses to the proposed changes in arts offerings.[2]

Studies of performing arts audiences conducted to date have tended to focus on correlates of past attendance.[3] Repeatedly, they have found that attenders are disproportionately drawn from the well-educated and those with higher incomes. However, irrespective of levels of income and education, we still know little about how some individuals become arts attenders and others do not. And we know even less about what could be done to make non-attenders attend more often.

One study, by Eric Marder, has attempted to answer the last question.[4] Marder developed a model of respondents' attitudes toward seven performing arts, and then asked the model what would happen if selected beliefs about these arts were changed, deriving estimates of likely gains and losses to each art form. Three problems exist with Marder's pioneering work. First, respondents were not asked directly what their responses to the changes would be. Second, relative choices were evaluated; a gain for one art form always meant a loss for another. Finally, no assessment was reported on who changed. Thus, one cannot tell whether the changes simply attracted more attendance among present attenders, or, in fact, broadened the arts audience.

Approach

To overcome these problems, the present study took as its major focus the likely response of potential theater and symphony attenders to proposed changes in the offerings of those institutions. Data to help explain these responses were gathered on past attendance, beliefs about symphony and theater attendance, benefits sought, consumer lifestyles, as well as standard socio-economic background information. The data were gathered by means of telephone interviews with randomly selected respondents fourteen-years of age or older in the four study cities. Since the focus of the study was increasing attendance among past light or non-attenders, heavy users were undersampled. Further, to conserve resources, respondents who were determined to have virtually zero probability of attending either theater or symphony in the future were also excluded from the interviews.[5] Comparisons of study characteristics with available census data suggest that the sample population tends to be younger, better educated, and wealthier; and is substantially more often female than the population of the four areas. These differences are consistent with those found in other studies using telephone methods of interviewing, and consistent with our procedure for screening out those with zero probability of attending the arts.

To assess the responsiveness of this sample to changes in the offerings made by the performing arts in the study communities, a series of "what if" statements were constructed, embodying new offerings that had been tried in other communities (and in two cases in one of the communities studied), or that had been proposed elsewhere, and that could be explained to our respondents in telephone interviews.[6] "What if" questions are, of course, biased predictors of actual short-run behavior. Respondents are speculating on their future behavior with respect to hypothetical alternatives. The likelihood of their carrying through their speculation in the event the alternative was introduced is unknown. For this reason, the responses reported in the pages to follow should not be considered good predictors of absolute levels of response. However, we are willing to assume that whatever bias is found in the answers is constant across the hypothetical offers. This reasonable assumption permits us to compare similarly biased

Alan Andreasen, Professor, and Russell Belk, Assistant Professor, Business Administration, University of Illinois Urbana, Ill. Dr. Andreasen is also a Research Professor, Survey Research Laboratory, University of Illinois.

offerings. This is, indeed, our objective: To discover which offerings are relatively more effective in broadening the audience for the performing arts.

Results

Forty-two percent of the respondents indicated that they had attended theater in the preceding year and fourteen percent said they had attended a symphony concert. Ten percent said they had attended both; fifty-four percent neither. Our principal concern, however, was not with past behavior but with future behavior; it is precisely this behavior that arts marketers will have to influence.

Respondents were asked, "How likely do you think you are to attend a live professional theater performance (a symphony concert) in the next year or two?" Responses reported in Table 1 show that 44 percent are at least somewhat likely to attend the theater and 29 percent the symphony. As can be inferred from past and future attendance figures, future symphony patrons are more often drawn from those who did not attend in the past year. The proportion of somewhat or very likely future attenders who did not attend last year is 65 percent for symphony and 39 percent for theater. This may well reflect the lower availability of symphony performances relative to theater performances in the four communities. It may be speculated that this also reflects an attendance pattern by a significant part of the symphony audience that may be described as every-other-year attendance. At the same time our data show that those who attended symphony last year are a more "loyal" audience than are past theater attenders. Seventy-two percent of the former will somewhat or very likely return in the next year or two compared to only 63 percent of past theater goers.

Before exploring changes in planned future attendance in response to the proposed new offerings, it is first important to understand the basic determinants of that future attendance. Most past audience studies analyzed such attendance using a standard set of demographic variables considered one at a time. In the present study, we have made two important advances. First, we have added some important predictor variables to the standard set relating to the respondent's childhood involvement in the arts and consumer lifestyle information. Second, we have been able to analyze the set of variables simultaneously to learn which variables are most important in explaining the variability in planned future attendance.

At the present stage of analysis, classification of consumers according to lifestyles has not been completed. Table 2, however, reports simple correlations of 49 remaining variables with the likelihood of attending theater and symphony. Simple correlations greater than $\pm$ .045 can be considered significant. From the point of view of a total prediction from these correlations, a problem arises in that many of the variables are related. For example, as income increases so does the likelihood that the spouse is employed ($r = .36$) and the number of cars in the family ($r = .46$). The problem then is to conduct an analysis which assesses the importance of several variables in explaining the likelihood of attendance while taking account of their interrelationships. One useful technique for doing this is step-wise regression.[7] In this technique predictors are selected one at a time, starting with the single best predictor and adding the one variable at each "step" which increases predictive accuracy the most. This continues until the best remaining predictor which could be added produces no significant improvement in overall predictive accuracy.

Of the 48 variables examined, eleven were found to add to the prediction of theater attendance likelihood. These eleven predictors were jointly able to predict 24 percent of the variability in reported likelihoods. While this leaves the majority of variability in likelihoods "unexplained" (and potentially related to the lifestyle characteristics to be examined later in the study), one-fourth of the variability of theater attendance likelihoods can be accounted for by these factors.

The variables which aided this prediction are shown in descending order of usefulness in Table 3. The larger the "beta weight" in this table, the more useful the variable was found to be. These results may be compared to the simple correlations reproduced from Table 2. Differences between the tables regarding the importance of variables is due to the fact that variables introduced early in the analysis can be highly related to the information supplied by later variables (e.g., education and past exposure to ballet), so that the later variables do not enter the full analysis because they provide little additional predictive accuracy.

Table 3 shows that the best predictor of future attendance at theater is experience, expressed as recent past attendance and interest in theater during one's formative years.[8] The importance of continuous experience with the theater is suggested by negative contribution of having once seen three or more plays but not attending in the past year. Future attendance is also positively related to other past (cultural) experiences: interest in classical music during one's formative years, working in a theater, music or dance production, recent listening to classical music, and visits to art galleries or museums. The latter activities suggest a general predisposition towards cultural events by theater goers.

Only four of the eleven significant variables are standard demographics. As has been found in other past studies, age is negatively associated with likely future attendance and education positively associated. What is important is that we have shown that these effects hold up when the influence of several other factors including income are simultaneously taken into account. With respect to income itself, the fact that only a middle income group entered the analysis suggests that income effects may not be linear. The simple correlations, at least for theater, suggest that this indeed may be the case.

Finally, there is a "city" difference; those in Columbia, South Carolina, are less likely to attend the theater in the future than those in the other three cities in the study.

Table 4 reports "beta weights" and simple correlations for the fourteen variables that explain about 29 percent of the variance in likely attendance at symphonies. Interestingly, eight of the eleven variables in the theater regression reappear in Table 4, with symphony attendance in the last year obviously substituting for a ninth, theater attendance in the last year. Neither age nor working in a theater, music, or dance production enters the predictions of future symphony attendance as they do in predicting theater attendance.

Symphony attendance is also predicted by membership in a second, lower middle income group, reinforcing the possibility of a non-linear relationship between arts attendance and income. There is a positive relationship with the respondent's father's education, with parental interest in classical music during the formative years, and with the respondent's own interest in classical music while growing up. This suggests that the formative years are particularly crucial in the development of one's taste for

classical symphonic music. Recent exposure to ballet is a predictor of future symphony attendance as well as attendance at theater, art galleries, and museums, suggesting that a general cultural predisposition may be descriptive of symphony goers as well as theater goers.

Finally, the positive effect of having been to three symphonies ever but none in the past year would seem to add credence to the suggestion that some symphony attendance for many may be an every-other-year event.

All those who indicated some likelihood of attending theater or symphony in the next year or so were asked whether their attendance would change if several changes were made in the performing arts' offerings. Two questions were of interest here: (a) Are some changes in offerings more effective than others in increasing arts attendance?; and (b) Are some changes more effective in broadening the audience than others?

The answer to the first question is clearly yes. Indices of relative effectiveness were computed for twelve new offerings for symphony and twelve for theater as follows:

1. Respondents saying they would go "much more often" as a result of a new offering were counted as two additional attendances; respondents going only "more often" were counted as one. Respondents claiming they would go "less often" were counted as one less future attendance.
2. The resulting number of net new attendances was divided by the number of interviewees responding to the new offering to yield an effectiveness score for the offering.
3. Each effectiveness score was divided by the average effectiveness score for all twelve new offerings and multiplied by 100 to yield the indices reported in Table 5.

(Four offerings were scaled on a different basis and excluded from these calculations.) These indices (Table 5) show two obviously superior strategies: introducing more "star" performers and offering second tickets for half price. Offering second tickets at half price appears to be somewhat more effective for symphony than theater. It is also the case that offering a short talk before a symphony performance is more effective than this type of talk after a play. On the other hand, changes in types of theater performances are more effective than changes in types of symphony programs. Finally, data not reported in Table 5 show that offering second tickets at half price is a substantially better pricing strategy for increasing audiences than giving series discounts as high as 30 percent and discounts on individual tickets of up to three dollars.[9]

To ascertain whether some strategies broaden the audience more than others, respondents were divided into those who attended theater or symphony in the past year and those who did not. If a given strategy was more appealing to non-attenders than attenders, we would conclude that it was effective in broadening the audience. Table 6 shows that three strategies broaden the symphony audience. Non-attenders would be more[10] affected if:

1. More choral music were offered.
2. They knew that people were dressing more informally.
3. Five times a year symphony performances were offered nearer their homes, with a performing space not as nice but prices 20 percent lower.

It should be noted, however, that offering choral music had the lowest total effectiveness of all the strategies according to Table 5, and that nearer locations and informality drew only average responses among past non-users. Clearly, the symphony manager must choose between strategies that broaden the audience by attracting both attenders and non-attenders, or broadening it by strategies that appeal more exclusively to non-attenders. Cost-benefit analysis of these alternatives is beyond the scope of this paper.

None of the new offerings was effective in broadening the audience for theater. Indeed, having more classical plays may keep past non-attenders away while giving series discounts or half-price tickets on the day of the performance (for somewhat poorer seats) would be more appealing to regular attenders. Not surprisingly, present attenders would put up with a greater price increase before reducing their attendance than would recent non-attenders.

Conclusions

This paper reports data from an early stage of analysis. Further investigation of lifestyle and attitude data is forthcoming. At this point, our analysis indicates:

1. When symphony and theater patrons are compared as to last year's attendance and likely future attendance, symphony patrons appear to be made up of two groups: (a) a loyal core and (b) those who may attend regularly but less than annually. Clearly data are needed on performing arts patronage over time.
2. Much of the same set of variables predicts future attendance for theater and for symphony. Experience with the arts and possibly a general predisposition towards cultural institutions are the best predictors, with continuous experience more important for theater. These variables in general appear more important than the demographics emphasized in other studies.
3. There are clear differences in the overall effectiveness of alternative new arts and symphony offerings, with most effectiveness attributable to including more famous performers in programs and offering second tickets at half price. There are strategies that appear to selectively broaden the audience for symphony but not for theater. The choice for symphony managers is whether to broaden audiences selectively or through strategies that appeal to present attenders as well. The latter is the only option open to theater managers.

Footnotes

1 National Endowment for the Arts, Research Division Program Solicitation, February 4, 1976.

2 The authors wish to acknowledge the assistance of Mati Frankel, Douglas Schellinck and Gregory Upah in designing and analyzing this study.

3 Eric Marder Associates, Inc. The Finances of the Performing Arts. New York: The Ford Foundation, 1974.

"Winston-Salem/Forsyth County: Public Perspectives on the Arts and Culture," National Research Center of the Arts, Inc., July, 1974.

National Research Center of the Arts, Inc. Americans and the Arts. New York: National Committee for Cultural Resources, 1976.

4 Eric Marder Associates, Inc. op.cit.

5 Several screening questions were used to make this determination, with the result that 14.2 percent of screened respondents were dropped because they were likely non-users. Seven and a half percent of screened respondents were dropped because they were heavy users.

6 Telephone and credit card purchease opportunities were possible in Atlanta, Georgia and all cities offered season tickets. The necessity to explain offerings to respondents restricted us from asking about several voucher plans in practice or planned around the country.

7 Using version 7 of Nie et al., Statistical Package for the Social Sciences, 2nd Edition (New York: McGraw-Hill, 1975).

8 Note that these are independent factors in that the relative importance of one variable in this analysis (as shown by the beta weights) is computed after the effect of all of the other variables displayed in Table 3 is taken into account.

9 The latter two offerings are not shown in Table 5 because they are scored differently from others there. The percentages were computed by comparing the proportion of people going more often or much more often in response to a second ticket at one-half price to the proportion of respondents who would go more often to any of the individual or series price discounts offered.

10 Probability $\leq .05$ that users and non-users respond comparably.

Table 1

LIKELY FUTURE ATTENDANCE AT THEATER

AND SYMPHONY BY PAST ATTENDANCE

Likelihood of Future Attendance	Theater			Symphony		
	Attend Last Year			Attend Last Year		
	Yes	No	Total	Yes	No	Total
Not At All likely	10 %	25 %	19 %	4 %	32 %	28 %
Not Very likely	27	45	37	24	46	43
Somewhat Likely	28	17	22	26	15	17
Very Likely	35	13	22	46	7	12
	100 %	100 %	100 %	100 %	100 %	100 %
Number of Cases	630	859	1489	207	1282	1489

Table 2

SIMPLE CORRELATIONS OF SELECTED SOCIO-ECONOMIC CHARACTERISTICS AND LIKELIHOOD OF ATTENDING THEATER AND SYMPHONY

Variable	Correlation With Likelihood of Attending Theater	Symphony
Past* Attendance at Theater	.32	.25
Past* Attendance at Symphony	.20	.34
Live in Memphis	.06	.04
Live in Atlanta	.08	.08
Live in Columbia	-.15	-.13
Play Musical Instrument	.12	.14
Ever Worked for Theater, Music, Dance Production	.18	.14
Ever Attended 3 Plays (But None Last Year)	-.19	-.13
Ever Attended 3 Symphonies (But None Last Year)	-.04	.03
Spouse Is Employed	.07	.00
White	.01	-.02
Female	-.02	-.01
Past* Attendance at Rock Concerts	.12	.13
Listened to 10+ Classical Records Last Year	.14	.17
Past* Visits to Art Galleries, Museums	.22	.24
Past* Attendance at Non-Symphony Classical Music	.16	.19
Past* Seeing Ballet Live or on Television	.11	.20
Number of Cars Owned	.02	.18
Education of Respondent	.19	.16
Education of Father	.11	.14
Education of Mother	.12	.12
Number of Children Over 14	-.07	-.06
Age of Respondent	-.12	-.07
Interest in Theater When Growing Up	.28	.24
Parent's Interest in Live Theater	.20	.23
Interest in Classical Music When Growing Up	.23	.35
Parent's Interest in Classical Music	.19	.29
Years in Area	-.12	-.09
Amount of Leisure Time Available	.02	-.02
Teenage Life Cycle Stage	-.04	.00
Single Adult Life Cycle Stage	.13	.12
Young Married Life Cycle Stage	.09	.06
Young Children Life Cycle Stage	-.03	-.05
Older Children Life Cycle Stage	.00	-.02
Empty Nest Life Cycle Stage	-.07	-.07
Widow Life Cycle Stage	-.06	-.01
Income Under $7,000	-.05	-.02
Income $7,000-$9,999	.01	.03
Income $10,000-$11,999	-.05	-.03
Income $12,000-$14,999	.03	.00
Income $15,000-$19,999	.05	.03
Income $20,000-$25,000	.02	.03
Income Over $25,000	.08	.05
Employed Full Time	.06	.04
Employed Part Time	.08	.04
Temporarily Unemployed	.01	.00
Retired	-.11	-.04
Not Employed	-.03	-.03
Homemaker	-.06	-.06

*"Past" means within the last twelve months.

Table 3

STEPWISE REGRESSION RESULTS PREDICTING
THE LIKELIHOOD OF THEATRE ATTENDANCE*

Variable	Beta Weight	Simple Correlation With Attendance Likelihood
1. Interest in Theater When Growing Up	.181	.28
2. Past Attendance at Theater	.163	.32
3. Age of Respondent	-.118	-.12
4. Live in Columbia	-.096	-.15
5. Interest in Classical Music When Growing Up	.096	.23
6. Education of Respondent	.090	.19
7. Ever Attended 3 Plays (But None Last Year)	-.083	-.19
8. Ever Worked for Theater, Music, Dance Production	.078	.18
9. Listened to 10+ Classical Records Last Year	.078	.14
10. Past Visits to Art Galleries, Museums	.059	.22
11. Income $15,000-$19,999	.057	.04

*Using 90 percent confidence level for variable inclusion.

Table 4

STEPWISE REGRESSION RESULTS PREDICTING
THE LIKELIHOOD OF SYMPHONY ATTENDANCE*

Variable	Beta Weight	Simple Correlation With attendance Likelihood
1. Interest in Classical Music When Growing Up	.209	.35
2. Past Attendance at Symphony	.206	.34
3. Past Seeing Ballet Live or on Television	.093	.20
4. Income $15,000-$19,999	.076	.03
5. Education of Father	.076	.14
6. Listened to 10+ Classical Records Last Year	.074	.17
7. Interest in Theater When Growing Up	.073	.24
8. Income $7,000-$9,999	.072	.03
9. Ever Attended 3 Symphonies (But None Last Year)	.069	.03
10. Ever Attended 3 Plays (But None Last Year)	-.064	-.13
11. Parents' Interest in Classical Music	.061	.28
12. Education of Respondent	.059	.16
13. Live in Columbia	-.058	-.13
14. Past Visits to Art Galleries, Museums	.053	.24

*Using 90 percent confidence level for inclusion.

Table 5

EFFECTIVENESS INDICES FOR SELECTED MANIPULATIONS

Offering	Symphony			Theater		
	Past Users	Past Non-Users	Total	Past Users	Past Non-Users	Total
A. Product Variables						
1. Type of Performance						
More Classical Music	108	103	105			
More Romantic Music	115	87	97			
More Modern Music	56	52	54			
More Concertos	60	55	57			
More Choral Music	33	47	43			
More Musical Comedies				136	162	149
More Classical Plays				31	16	26
More American Drama				107	124	115
More Modern Comedies				118	112	116
More Original Plays				45	32	41
2. Quality of Performance						
More Famous Performers	160	160	161	153	172	163
3. Formality of Atmosphere						
Dressing More Informally	65	96	87	62	89	75
4. Extent of Learning Opportunities						
Short talk/discussion	108	116	114	62	68	66
B. Price						
Second Ticket One-Half Off	212	173	186	165	169	169
Telephone/Credit Purchasing	82	78	80	69	64	69
C. Combination Strategies						
½ Off Day of Performance, Poorer Seats	114	116	116	168	102	117
Nearer Location, 20 Percent Discount	81	108	100	83	88	87

Table 6

PROBABILITY THAT RESPONSES OF NON-USERS AND USERS TO NEW OFFERINGS ARE THE SAME*

Offerings	Symphony	Theater
A. Product Variables		
1. Type of Performance		
More Classical Music	.23	
More Romantic Music	.34	
More Contemporary Music	.99	
More Concertos	.73	
More Choral Music	.00	
More Musical Comedies		.82
More Classical Plays		-.09
More American Dramas		.95
More Modern Comedies		.43
More Original Plays		.57
2. Quality of Performance		
More Famous Performers	.10	.19
3. Formality of Atmosphere		
Dressing More Informally	.02	.12
4. Extent of Learning Opportunities		
Short Talk/Discussion	.52	.57
5. Quality of Seating		
Series With Good Seats	.89	.58
B. Price		
1. Individual Ticket Reduction	.37	.33
2. Second Ticket One-Half Off	.22	.46
3. Series Ticket at Discount	.19	.08
4. Telephone/Credit Purchasing	.82	.61
5. Individual Ticket Increases	.13	.02
C. Combination Strategies		
1. Half-Off Day of Performance, Poorer Seats	.48	.01
2. Favorite Performance***		
Individual Ticket Increase	.45	.22
3. Nearer Location, 20 Percent Discount	.05	.40
**Approximate Number of Cases	(420)	(652)

*Probabilities are likelihood of obtaining computed Chi-square value when responses to offering are truly independent of past attendance classification.

**Actual number of cases varies by offering.

***Selected from five alternatives indicated above.

A Behavioral Approach for Assessing the Demand for Cultural and Artistic Recreational Activities

George L. Peterson and Alex Anas

There is a growing need for scientific methods of assessing demand for cultural and artistic leisure time activities. This paper presents concepts and methods currently being developed and tested as part of a study of urban recreation demand.[1] The study includes artistic and cultural activities as part of a much broader spectrum of leisure time pursuits.

Our approach to demand assessment is based on an explanation of the individual choice process underlying recreational behavior, rather than on observation of aggregate patterns of behavior. Our approach hinges on six basic concepts which underlie the behavior of individual recreationists. These are needs, attitudes, perceptions, market segments, and choice constraints.

Needs, the basic elements of human motivation, are manifestations of physiological and psychological drives, personality, and psychological deprivation. Leisure time activities, including cultural and artistic pursuits, are important instruments to the satisfaction of needs, and needs strongly influence which activities an individual will choose.[2]

Driver has extensively studied the motivations and need benefit of outdoor recreation activity.[3] Based on his work and the work by Tinsley and others, we have identified the following need concepts for use in the assessment of recreation demand:

1. Achievement, including skill development and exercise
2. Enjoyment of nature
3. Tension release and relaxation
4. Learning and thinking
5. Meeting and being with members of the opposite sex
6. Doing things with the family
7. Having thrills and excitement
8. Independence and control
9. Helping other people
10. Directing the activities of other people
11. Enhancement of self-worth
12. Avoidance of boredom.

It is expected that these also apply to cultural and artistic activities, although there may be some additional need concepts that should be added.

We can thus perceive of needs as the most basic element in demand. If we observe a significant change in the demand for certain recreational activities, two fundamental questions ought to be asked: Is this change in demand caused by a widespread change in needs? If so, can these new needs by identified and measured?

The first question is important because the shift in demand could result from the increased availability of the new activity, increased awareness that it is available, more leisure time, changes in participation costs, and a variety of other circumstantial changes. Thus, the new levels of demand could be the way in which old and well established needs are satisfied. The second question is important if the concept of needs is to serve a practical purpose in the prediction of demand.

We now know that an individual's need-state can be described on several scales, each of which measures the intensity of a single need. Subsequently, a great deal can be inferred about that individual's likely recreation patterns. For example, an individual with a strong need for physical exercise can be judged unlikely to satisfy it via movie going and more likely to satisfy it via dancing or hiking. Similarly, an individual with a strong need for nature enjoyment is unlikely to satisfy that need via attending theatre, but much more likely to do so by engaging in outdoor photography.

Attitudes are predispositions in favor of a particular activity. Attitudes are formed through actual experience, personal background or education; or through social norms and pressures which act in a more indirect and subliminal way. Attitudes are also influenced by the specific needs that an individual is attempting to satisfy through cultural and artistic recreation.

Perceptions are a recreationist's view of the experiential or need-satisfying content of specific activities. Perceptions can be measured by methods which reveal how much of a certain attribute a specific activity contains. For example, assume that "relaxation" is an attribute (an experiential property) of all cultural and artistic activities. A certain individual might perceive that an opera provides much more relaxation than pottery or folk dancing. On the other hand, if the attribute is "interaction with

George Peterson is Professor, Department of Civil Engineering, and Alex Anas is the Acting Director, Urban Recreation, Northwestern University, Evanston, Ill.

others," folk dancing might rate higher than both opera and pottery. Finally, if the attribute is "using one's hands creatively," pottery might take the lead. In summary, an attribute is the experiential quality or stimulus provided by an activity. A perception is a measure of the intensity of an attribute to a particular recreationist.

Perceptions play an important role in the formation of attitudes, but, as we observed above, attitudes have many diverse causes of which perceptions are only a limited set. In fact, for the recreationist who is inexperienced with a given activity, attitudes and perceptions are almost inseparable. It can even be said that the inexperienced base their perceptions on preconceptions (attitudes) which are externally influenced. Participation in a recreational activity tends to change perceptions first, then attitudes, and ultimately it takes its toll on demand. In order to accurately forecast demand, it is important to first accurately measure perceptions, attitudes, and needs.

Recreationists develop preferences over the spectrum of activities facing them, on the basis of their perceptions, needs, and attitudes. A recreationist will prefer activities that he perceives as better satisfying his needs. If one activity is preferred over another, the likelihood that it will be chosen is higher under the influences of external income, time budget, and other restrictions.

Our approach relates activity choice to activity preference, and we perceive choice in probabilistic terms. A recreationist could participate in every conceivable activity with a probability ranging from zero to unity. By properly aggregating these choice probabilities over a set of individuals, we can arrive at a forecast of aggregate demand expressed as the number of "person hours of theatre attendance" or "person events of theatre attendance."

Thus, an important step in demand assessment is the proper quantification and measurement of needs, attitudes, perceptions, and preferences so that choices can be predicted.

Two more notions are crucial in behavioral demand assessment methodology. These are the notions of market segmentation and of choice constraints.

Market segmentation is the process of grouping individual recreationists. The criterion for such grouping is that the behavioral process of individuals within the same group be approximately the same. Traditionally, market segments have been established using demographic information, so that individuals were grouped by sex, age, life cycle, income, and education characteristics. In our behavioral approach, needs, attitudes, personality traits, and past recreational experience might prove more useful segmentation criteria.

Choice constraints refer to physical, medical, financial, time related, talent related, and any other personal or social restrictions which prohibit the manifestation of needs and preferences as recreational choices. When, because of such constraints, demand for a certain activity does not result in choice, it is said that the demand for that activity is latent or unexpressed. Choice constraints can also be powerful criteria for market segmentation alongside the above mentioned criteria.

The Demand Assessment Process

The demand assessment process utilizes a questionnaire to gather several categories of information from recreationists.[5] In this report, we identify the categories of information to be solicited by such a questionnaire, and show how each category fits into the framework of "basic concepts."

It is first necessary to identify the activities to be included within the scope of the study. For example, if cultural spectator events are being studied, it will be crucial to distinguish between attending theatre and going to a movie. It might be less important to distinguish among types of movies or types of plays. Similarly, playing the violin, the viola, and the trumpet can be conceived as separate activities. In a study of a different sort, groupings such as playing a string instrument might be more appropriate. At another level of inquiry, playing a musical instrument might suffice.

As a rough general rule, avoid the study of two or more activities which are very close substitutes, and represent groups of activities by a few, preferably one or two, typical activities, rather than by aggregates of activities. For example, in a study of the demand for various instruments, it might be preferable to choose piano, violin, trumpet, and drums rather than broad categories such as wind instruments, string instruments, etc. The demand for viola, clarinet, and trombone might be better inferred from studies of piano, violin, drums, and trumpet than from studies of broad aggregates.

In any study of demand, the problem does arise of how many activities to study, and how to aggregate the activities. The most preferable approach is to let the recreationist define his or her activity. If a list of activities is deemed necessary to orient and stimulate the respondent, it is probably better to choose activities representative of the diversity that exists in the entire spectrum of activities than to aggregate those activities into groups.

To directly measure choice, the responding recreationist is asked to indicate how often he or she participated in the sample of activities during various seasons or time frames.

A major difficulty in the assessment of recreation demand is the fact that activities which appear quite distinct and diverse may yet closely satisfy the needs of given recreationists. Consciously or not, recreationists judge each activity via its experiential qualities or attributes. Although perhaps hundreds of such attributes influence behavior, it is imperative, in a questionnaire-based study, to keep their number down to a manageable size. To get maximum measurement of substitutability, attributes should be selected which are relevant to as many activities as possible. Hopefully, but not necessarily, all activities will reflect some degree of each experiential attribute. The larger the number of activities covered by each attribute, the stronger is the researcher's ability to analyze substitutability.

Recreationists' ratings of an activity's attributes provide the analyst with a profile of that user's perceptions of the activity in question. In order to measure these perceptions, the question ought to be asked as follows:

"Attending theatre gives me a chance to appreciate human interaction." In this example, the activity is "attending theatre," the experiential attribute is "appreciating human interaction." The respondent can be asked to respond by indicating the extent of his agreement with this statement. In our research, we have used a five-point scale varying from "Strongly disagree," to "Disagree," to "Neutral," to "Agree," to "Strongly agree."

Attribute ratings reveal the perceived similarity among various activities, and can be the basis for a behavioral grouping of activities.

Ideally, each need-related attribute concept should be measured by numerous questionnaire items to ensure reliability and to avoid semantic ambiguity. However, this would produce an inventory of several

hundred items, which is not practical in a demand assessment questionnaire. Thus, a short pragmatic inventory is needed. In our questionnaire, we use 23 items to estimate a dozen significant attributes.

To measure recreationists' needs we can reverse the focus of the activity specific attribute statements. The following is an appropriate way to ask the question: "Appreciation of human interaction is important in my recreational behavior." Again, the respondent is asked to indicate his degree of agreement or disagreement, which this time measures the strength of the need "appreciating human interaction." Needs and attributes need not be based on the same concept, and needs may be more general than attributes. It is expedient, however, to conceive of attributes as those stimuli that satisfy corresponding needs in the context of an activity. In this way, it is possible to obtain a measure of how various experiential attributes in the context of several activities reveal the differential satisfaction of the same recreationists' needs.

Our preliminary questionnaire tests show that each respondent need only provide attribute ratings on two or three recreational activities of his choice. Although a larger number of activities is to be preferred, it also makes the questionnaire tiring and difficult to complete. Our pretests also show that a list of 20 to 25 questionnaire items measures a fairly broad spectrum of about a dozen dimensions of experiential content relevant to a large number of recreational activities. More rigorous or more detailed need tests are available, including the Edwards Personal Preference Schedule (EPPS), the Personality Research Form (PRF), and, for specialized environmental "needs," the Environmental Response Inventory (ERI).

Experiential attributes are intended to measure the content of activities that appeal to primarily psychological needs and are not chosen to be specific to recreation sites or situations. A second set of attributes measures aspects of activities related to sites of recreation, to travel, and to the situation within which a recreationist engages in a recreational activity.

These attributes are needed in recognition of the fact that, although an activity may appeal strongly to the satisfaction of certain needs, the available sites for that activity may inhibit or limit participation in the activity.

Trip purpose, time of year, duration and cost of trip, weather, participation cost, waiting time, site quality, and site congestion can all be used as situational attributes.

In our pretests, we have solicited most of the above attributes for the same two or three activities for which attribute ratings were obtained. In doing so, we have asked respondents to report this information for their last participation in the relevant activity.

Correlating recreationists' activity choices with their attribute ratings according to various statistical procedures reveals recreationists' preferences indirectly and provides the analyst with a measure of each attribute's importance. It is still desirable to directly measure activity preferences by asking recreationists to report a degree of attractiveness for each of a chosen list of activities. In our pretests, this is done for 20 distinct activities. Together with a rating of the availability of each of these activities, we can infer the extent to which latent demand plays an important role in recreational choice.

Concluding Remarks

In this paper we have provided a qualitative description of the essential concepts and identification problems that play a role in the behavioral assessment and prediction of recreation demand. We have begun testing these concepts for a wide variety of activities which include cultural and artistic pursuits. We expect that the same methodology is also applicable to a more in-depth study which focuses exclusively on cultural and artistic activities.

Our confidence stems from the fact that cultural and artistic recreation habits are formed in ways very similar to habits in sport, nature seeking, and outdoor recreation. The key to a correct assessment procedure is the accurate measurement of recreationists' needs, attitudes, perceptions, preferences, and choices, and the proper identifications of the interactions among these concepts.

Footnotes

1 This research is currently in progress under Grant No. APR76-19086, titled "Prediction of Urban Recreation Demand," from the RANN (Research Applied to National Needs) Division of the National Science Foundation.

2 It is beyond our scope to discuss specific needs in depth. This area has been the object of much psychological research. To summarize some significant findings, Tinsley reports 42 needs that are leisure activity specific. The needs which differentiate most strongly among leisure activities are (1) sex, (2) catharsis, (3) independence, (4) understanding, (5) getting along with others, and (6) affiliation (cf. Tinsley, Howard E.A. et al., "Leisure Activities and Need Satisfaction," Journal of Leisure Research, Vol. 2, No. 9).

3 B.L. Driver, "Quantifications of Outdoor Recreationists' Preferences," in Research, Camping and Environmental Education, Penn State HPER, Sec. 11, University Park, Pa., December 1975, 00165-187.

4 See J. Neulinger and C.S. Rapps, "Leisure Attitudes of an Intellectual Elite," Journal of Leisure Research 4 (1972):196-207; A. O'Connor, "A Study of Personality Needs Involved in the Selection of Specific Leisure Interest Groups." University of Southern California. Dissertation Abstracts International 31, 11-A (1971):5865; J.R. Kelly, "Three Leisure Locales; Exploring Role Stability and Environmental Change," in B. Van der Smissen (ed.), Indicators of Change in the Recreation Environment - A National Research Symposium. HPER Series No. 6, the Pennsylvania State University, University Park, Pa., 1975.

5 The development of this questionnaire has been described in "A Questionnaire Design and Survey Strategy for the Assessment of Urban Recreation Demand," research report, Department of Civil Engineering, Northwestern University.

How Broadcasters Assess the Response to Program Offerings

Natan Katzman and Kenneth Wirt

Our project examined the nature of broadcasting in the Uni.ed States in light of the potential for something called arts and cultural programming. The first problem we came up against was the lack of any clear definition of arts and cultural programming. More important, though, was the need to make distinctions between TV and radio broadcasters and between commercial and non-commercial (or public) broadcasters.

The radio and TV industries have basic structural differences. There are just under 1,000 television stations (over 700 commercial and over 250 public) and over 8,000 radio stations in the United States. The television industry is dominated by the three commercial networks which account for most prime time programming on approximately 600 network affiliates: six out of seven commercial stations. Radio programming is on a station-by-station basis, and stations tend to program by formats rather than programs.

Public broadcasting is a parallel, but different set of TV and radio stations that has developed because of an early faith in the educational power and merits of the two media. Public broadcasters do not worry about profits, and they are not seriously involved in ratings competition, although they worry about how many people they reach.

Although public broadcasting has been our primary client in one way or another over the last five years, and although we know a great deal about the details of public TV programming and audiences, I do not want to dwell on the problems of non-commercial broadcasters, but focus instead on commercial broadcasting.

No matter what statistics you may generate regarding attendance at artistic and cultural events or actual participation in artistic endeavors, the fact that at eight o'clock tonight three-quarters of the homes in Chicago are turned to television should overwhelm you with the effect of this medium on our culture.

Commercial broadcasters respond to program offerings by creators by contemplating how many people will watch those offerings. This reflects the nature of the industry. The commercial broadcasters are not in the business of trying to sell products to their audiences. Rather, broadcasters are selling you (and all the rest of the audience) to the advertisers. Commercial broadcasters do not really care whether or not you buy the things that are advertised on their stations. They want to be able to go to sponsors and sell commercial time; and the rate paid for commercial time is based on the number of people in the audience. (Actually, rates for commercial time are also based on the nature of the people in the audience: younger adult women are the most expensive audience to buy because advertisers want to reach them with messages about all sorts of products.)

Thus, profits are directly related to the size of the audience; and in recent years, commercial broadcasters have added a long-range perspective to this relationship. They are aware of the correlation between audience size for one program and audience size for other programs on their channels. On the simplest level, there is a great deal of inertia in audiences. They stay from one program to the next. But there is also the factor of a station's ability to use its own air time to promote other programs and the more general phenomenon of a station (or network) becoming generally preferred by a group of viewers. The environment in which a program goes on the air is relevant: the size of the lead-in audience from the previous program, the number and nature of people who normally watch at that time, and the strength of competing programs all go into the assessment of response to programs. For example, a program with an above average audience may still be dropped if it fails to hold enough of the lead-in from an extremely successful preceding program, while a below average audience can sometimes be accepted if it is the result of programming on other stations such as "Roots" and "Gone With the Wind." Consequently, even if you had the money, commercial networks would not let you buy time to put on any program you wanted. It might pull down the ratings for the rest of the schedule. Audience measurement is the heart of the systems used by both commercial TV and commercial radio broadcasters to determine the response to their programming. And

Natan Katzman is the Director and Kenneth Wirt is Chief Research Associate, Research and Programming Services, San Francisco, California.

that brings us to ratings.

There seems to be a bad connotation to the term. Intellectuals especially seem to dislike the notion of ratings. One can argue the merits of the ways in which ratings are used to determine which programs will survive and which programs will never be aired again. I suppose that the argument is really about whether commercial broadcasters should be allowed to do everything possible to maximize profits. But the ratings do not make programming decisions any more than the census causes a certain portion of the population to be at a given income level. You have an industry that is trying to attract an audience to its broadcasters, and the various rating systems are nothing more than methods to estimate the size of the audience. Consequently, the important issues are technical ones: Are the estimates of audience size obtained by the ratings services valid indicators of actual viewership?

There are a number of techniques for estimating the size and composition of audiences for television programs. The most important of these estimates are provided by independent companies which sell their services to broadcasters. They are:

1) The national rating service (NTI/NAC) provided by the A. C. Nielsen Company in almost every week of the year for the three commercial TV networks.
2) The ratings for local markets provided in designated months by both Nielsen and the Arbitron service of the American Research Bureau.
3) The local metered services that Nielsen provides in the three largest metropolitan markets in the country, and Arbitron provides to Los Angeles, with further expansion planned.

The Nielsen Television Index, or (NTI), service indicates the size of the national audience for television programs. This gives the key ratings which are used by the networks to determine the success or failure of national programming. The NTI sample is based on the U.S. Census Bureau's records. Nielsen selects roughly 1,200 homes in all parts of the nation from a pre-designated sample drawn from census tracts. Their staff goes to the designated homes and gets about 75% of them to agree to be part of the sample; if there is a refusal, Nielsen gets a similar home in the same neighborhood. An "audimeter" is attached to every TV set in each home. This is a device that automatically records whether the set is on and what channel it is tuned to. The meters are linked by special phone lines directly to Nielsen computers in Florida. Thus, no response is required by anyone in the home, and the meters are as close to an unobtrusive viewing indicator as anything yet devised.

You may have already noticed that using meters does not give any information about the people who are watching a program. They only tell when the set is on and what channel is on. Nielsen gets demographic data about the homes in the NTI sample: income, presence of children, age of lady-of-house, education of head-of-house, etc. Meter-gathered data can be used to give viewing patterns among different kinds of households. However, another technique must be used to get information about the kinds of people who are watching.

A National Audience Composition panel is selected in the same way that the NTI sample is selected. Homes in this sample are given a response diary for each set in the home. Respondents are supposed to fill in all programs viewed by all household members. In addition, a "recordimeter" is attached to each set. It measures the number of hours the set is in use and produces a signal every half hour of set use to encourage diary entries. Efforts are made to have total set-in-use hours in diaries correspond to the amount registered by recordimeters. The NAC panel fills in the diaries on a week-on/week-off basis, and about a third of the panel is replaced each year. The NTI metered sample is also upgraded for shifting population patterns, and the sample is completely replaced over a five year period.

A wide range of data is reported by the NTI/NAC service. At the simplest level, the NTI meters are used to estimate the percentage of all U.S. homes with TV that were watching a given network. This is known as a rating. From this, Nielsen estimates the number of homes in the audience for a program. National ratings for non-network programs on PTV and independent stations are more difficult to obtain because the meters only indicate the channel that was watched; this is of little use in non-network situations where different channels around the country are carrying different programs. At the most complex level, there is the NTI/NAC Audience Composition Report issued at regular intervals. This combines data from the meters in the NTI sample and the diaries provided by the NAC panel. In a middle level of complexity, the NTI metered data have been used to generate audience estimates within household typologies. Ratings can be generated for income levels, regions of the country and so forth. By connecting the meters with a central computer, one can generate instant ratings. The morning after a program has been on the air, network executives have the ratings in their offices via teletype terminal.

Both Nielsen and Arbitron provide ratings for local television stations by "markets." The Nielsen service is known as the Nielsen Station Index (or NSI). Its reports are called Viewers in Profile (or VIP) books. Arbitron provides Television Market Reports known as the Arbitron books. The two services are basically quite similar.

Both services divide the United States into approximately 200 television markets. These are non-overlapping and cover all counties in the contiguous 48 states. Sampling is based on counties, and weighting procedures give approximate proportions to the respondents in specific counties. The key to the local market audience reports is the diary that is placed in each home in the NSI or Arbitron sample. The key to the survey method is the placement of these diaries. Both rating services use telephone solicitation to help place diaries; thus, the sample is drawn from among homes with telephone numbers. (The actual procedure is quite complex and NSI has recently introduced a method for reaching non-published numbers.) Phone calls are made to prospective sample homes to enlist cooperation. (Arbitron precedes the phone call with a letter.) The calls also help determine the number of television sets in the home. The diaries are sent (one for each set) along with a small cash incentive. The final stage of the survey procedure is in the hands of the diary recipients. They must complete and return the diaries. A spot check we have conducted indicates that the response rate varies from 48% to 60% of initially designated sample homes. The typical rate is in the middle of this range. Both rating services seem to get similar rates in the same market.

You may be wondering what the diaries are like. They are small booklets that have pages covering a

seven-day period. Days are divided into fifteen-minute periods, and respondents are asked to indicate whether the set was on or off. If it was on, they are asked for the channel, the program, and the members of the household who were watching. All the information can be indicated with simple marks on the diary form. The diaries are self-mailers, so at the end of the survey week respondents seal the booklets and drop them in a mailbox.

The local market reports of both rating services cover a number of four-week "sweep" periods each year. Over each sweep, local ratings for most urban markets reflect responses from 800 to 1,300 diaries. Over the course of a year, we estimate that the two rating services collect data from as many as 1.4 million households. (Given response rates, this means that initial contacts reach over two and a half million homes per year.) While the sample size for a single week in a small market may be relatively small, data aggregated over four weeks or several markets or several sweep periods tend to provide stable, reliable estimates of audience size and composition.

Since the NSI and Arbitron local rating systems are diary based, they give the same kinds of information as the NAC panels. The local rating books give ratings for all programs on the air in a market: network, independent, or public. They also give the demographic composition of the audience by age and sex of viewers.

In recent years, both rating services have established local metered markets. They install meters in a sample of homes, and thus they get almost instant ratings from the computer for every day of the year. Remember, though, that in most markets ratings are only obtained in the sweep periods. This is why syndicated programs such as the Nixon/Frost interviews only have ratings given for major cities where there are local meters. The NTI national system cannot easily deal with non-network audience patterns; NSI and Arbitron local reports take weeks to produce, and only local metered service can give next-day audience estimates for local programs.

Radio audience ratings are obtained by a similar diary-based system provided by Arbitron. There are two major radio sweeps per year, October/November and April/May, during which Arbitron surveys 163 different markets. Preplacement calls are made, and Arbitron then sends diaries to every household member over twelve. There is also a mid-survey follow-up call to make sure the diaries are being kept. Notice that radio diaries are based on listening by each individual, while television diaries represent all the viewers watching a particular TV set. That is how the radio surveys attempt to get information about the use of car radios and portable radios. The emphasis in radio reports tends to be the total reach of a station over a block of time rather than the size of the audience at a given moment.

In the end, the result of each of these surveys is an estimate of audience size; and there are many different statistics that are used to describe the nature of audiences. Ratings refer to the percentage of all homes that chose to watch a program, shares refer to the percentage of homes with a set on that is tuned to a given channel, cumulative audience refers to the homes that tune in at least once among a group of programs or in a specified time period, and various measures are applied to indicate the kinds of people who are in the audience.

Commercial broadcasters take all of these data and use them to assess the response to their programs. Over the years they have learned the relationships between the ratings and demographics for one program, and audience characteristics of other programs or an entire schedule. The so-called ratings game is played for large amounts of money among commercial broadcasters. The rules of the game are relatively simple: adjust your program schedule in any way you can so that the audience measurement services indicate you have as large an audience as possible.

Ratings don't make things better or worse. They simply indicate how many people have voluntarily chosen to explose themselves to television. Interestingly enough, an analysis of viewership reveals that upper income and upper educated groups have increased their television viewing much more rapidly in recent years than the other segments of society.

Perhaps more interesting, and more disturbing for policy, is the fact that all studies indicate that viewing levels are almost as high when there are not alternatives. That is, even if there were only one channel in Chicago, a vast majority of homes would still be watching whatever was on. The minute you introduce the medium, the public overwhelmingly chooses it.

Workshop: Estimating consumer demand

Moderated by Herbert B. Cahan, Secretary, Maryland State Department of Economic and Community Development, this workshop examined different techniques for studying consumer demand discussed in the morning papers. Workshop panelists included: Richard I. Orend, Alan R. Andreasen, Russell W. Belk, George L. Peterson, and Natan Katzman. Participants were particularly concerned with how survey research techniques could assist the producers of art (art institutions, etc.) with the questions or problems they have in the area of consumer demand. The chief concern expressed at the workshop by arts administrators was how to increase demand or attendance at arts performances.

Two general approaches to this problem were put forth. First, survey techniques could be used to identify regular attenders, occasional attenders, and non-attenders at arts performances. Additional surveying of the occasional or marginal attenders could yield information about factors that might induce them to attend. For example, in the study conducted by Andreasen and Belk, it was found that marginal attenders would respond to certain price and product changes.

Two concerns were raised in the workshop discussion with regard to changing the product to increase attendance. First, concern was expressed that the "artistic mission" may be impaired if the performance is altered substantially. Second, regular attenders or patrons may not care for the changed product. A decline in their attendance could offset gains from new audience.

The second approach to increasing demand proposed by a workshop participant involved increased advertising. This approach assumes that increased awareness leads to trial, which then leads to adoption. Thus, increased awareness, through increased advertising directed at groups of people who are not already regular attenders, leads to larger audiences. Once the new audience has been induced to attend, one can then experiment with techniques that might encourage them to return.

General trends in attendance at arts functions were also discussed. Much debate centered on whether there has been an "arts boom" in terms of attendance at arts functions in recent years. The consensus reached was that the participation in arts events has risen in terms of absolute members. However, it was not clear whether this was attributable to more regular attendance by the same arts patrons or new attenders. This suggested the need for more detailed information on attenders.

Also discussed were current trends which might affect future attendance at arts events. Several factors which are likely to increase attendance in the future are (1) increasing level of education among young adults; (2) rise in the number of dual-income families; and (3) decline in birth rates. The increased income of families coupled with having fewer children will provide more money and time for leisure activities. However, it was also noted that producers of alternative forms of recreation or entertainment aside from the arts would increase their efforts to compete with the arts for the recreational "dollar."

The Policy Uses of Audience Studies

David Cwi

Among arts councils and planning agencies there is an increasing awareness of the need for policy relevant data of the sort available from surveys of arts audiences and more general populations of interest. This paper will review data collected as part of recent policy oriented research conducted by the Center for Metropolitan Planning and Research of The Johns Hopkins University. A basic data base on the current audience for the arts will be reviewed with examples given of the impact of particular policy considerations on additional data requirements and overall research design.[1]

In the last three years the Metro Center has conducted two sets of audience surveys. One project was conducted jointly with the Regional Planning Council, the Baltimore area's council of governments agency. This project sought to develop and evaluate metropolitan-wide private and public sector approaches toward arts policy development and funding and examined 14 representative arts institutions on a number of audience, finance, program and management dimensions.[2] Last year the Metro Center conducted further audience surveys at eight of these institutions as part of a case study designed to pilot an arts economic impact model.[3]

When we began our Baltimore research it was assumed that little was known with confidence about the current audience for the Baltimore area's cultural resources. Research was conducted in order to resolve uncertainty and provide a basic policy relevant data set. It was thought particularly important to (1) develop a basic profile of the current audience for selected local arts institutions and (2) assess local institutional impact, e.g., spending by resident and tourist audiences. The survey instrument was designed to (3) allow institutions and their audiences to be compared and contrasted using measures of community use and support felt to be policy relevant and (4) questions were included of inherent interest to participating institutions and organizations.

Local planners may be surprised by the wealth of information that can be gathered using self-administered questionnaires completed during intermission, before the start of a performance, or while visiting a museum or other cultural facility. Audiences in Baltimore were asked to report the political jurisdiction in which they lived--the metropolitan area consists of Baltimore City and five surrounding counties--their zip code, age, family income, occupation, education, the size of their party, and spending by the party in addition to admission charges.[4] Tourists were asked whether their intention to attend the examined institution was their principal reason for being in Baltimore. In addition, local audiences were asked to report the frequency of their attendance not only at the institution at which they completed the questionnaire, but at all the other institutions in the study, as well as whether they were subscribers or members, and how much they contributed. Data was also gathered on respondent sex and race.

Specific policy purposes of the sort that will be examined below may require planners to gather additional information, not only about arts audiences but more general populations. But data of the sort identified above can be used both to compare and contrast cultural institutions and to answer basic questions about their current audiences.

For example, the data can help to identify the total number of individuals served by an institution by adjusting total reported attendance by respondents' reports of how frequently they attend. Service maps can be created for each institution based on the reported residence of users. More generally, planners as well as institutional managers could use the data base to answer a variety of interesting questions. Is there a core group of individuals who frequently use community institutions or is the audience for the visual and performing arts highly balkanized among institutions? Are there natural audience groupings; for example, are museum audiences more likely to also attend the theater rather than the symphony? With respect to the performing arts, are there interesting differences between single ticket buyers and subscribers? For all institutions, how do contributors and frequent users differ from non-contributors and infrequent users? What are the characteristics most highly correlated with being a contributor and attending frequently? Do contributors to one art form

David Cwi is a Senior Research Associate, Center for Metropolitan Planning and Research, The Johns Hopkins University, Baltimore, Md.

also give to others? and do they give the same amount? If local planners know the number of contributors reported by each institution, audience data may allow an estimate of the total number of local individual contributors to the arts. Institutions can be ranked according to their effectiveness at raising funds from among the audience, frequent attenders, individuals of means, and so forth.

Institutional managers would find this information useful in developing marketing and program strategies. Decision makers may find data on service and effectiveness in marshalling community support to be useful in evaluating requests for subsidy, in developing new programs, and for various policy specific purposes, e.g., verifying that public expenditures on artistic and cultural activities have important community externalities.

In recent years arts advocates have been especially interested in assessing the economic effects of arts and cultural institutions in the belief that this information was particularly influential in the public appropriations process. Audience surveys can be used to identify spending by audiences, one important dimension of an institution's economic impact. It should be noted that all the externalities cited in justifying public support can to some degree be examined utilizing information available from surveys of arts audiences or a more general population of interest. Other externalities typically cited include the role of artistic activities in the development of local identity, pride, and international prestige; the contribution of the arts to the education of children and adults; the broader influence of artistic and cultural amenities on the location decisions of individuals and businesses; the interdependence of art forms so that if we enjoy one art form we benefit from support to other art forms; and the desirability of securing today's cultural heritage for future generations. Nationally, data on these externalities is sparse. This may be a blessing in disguise inasmuch as were it to be available, it might be improperly used in public policy decisions.[5]

As communities develop specific goals and objectives, they will come to evaluate both the adequacy of the basic data set of their choice and the frequency with which it is felt necessary to collect data. Community goals and objectives are particularly important as the background against which research findings can be interpreted as "good" or "important" or "bad" and "undesirable."

For example, a recent resolution by the United States Conference of Mayors calls for local government to "help make the arts available to all their citizens" despite "the barriers" of "circumstance, income, background, remoteness, or race."[6] Let us suppose that an audience survey determined that certain types of individuals were not present in the audiences of the examined institution to the same extent they were present in the general population. Further, suppose a community interprets "making the arts available to all" not in terms of new activities geared toward under-represented groups, e.g., special programs on television or in schools and other settings, but in terms of attendance at museums and live performing arts events at their traditional sites. Suppose also, that the community has developed policies to accomplish this. The implementation on a recurring basis of the sort of survey noted would serve to monitor the effectiveness of these policies by identifying increases in attendence over time by a population of interest. This suggests that with the development of specific policy objectives there will evolve a need for information associated with the tasks of program development and evaluation; and this may require the implementation of recurring surveys.

Any discussion of data needs related to the evaluation of program effectiveness or quality must address the interplay between data on institutions, for example, their finances and levels of service, and data on user satisfaction. If we were discussing library service, we might acknowledge that the best indicators of quality service would not be the money spent and the number of books that were bought and borrowed, but citizen satisfaction. Are books available when desired? Are the needs of specific groups, e.g., the young and the aged, adequately met?

In the case of the arts, data on institutions might be augmented by studies of audience satisfaction with present services and reactions to proposed alternatives. While satisfaction with current services would be indicated indirectly by increases in the absolute number of season subscribers, the percentage who resubscribe, the percentage who become contributors, and so forth, audiences could be asked directly to identify their likes and dislikes on a variety of issues. In this regard it is important to note that measures of respondent preferences for services may have limited use to the decision-maker if views are based on little or incorrect information.

At some point, the policy maker may not only want to monitor the quality of service and the effect of various policy initiatives, but also predict what would happen if other policies were adopted. Or, he may want to understand why a policy intitiative failed; for example, why do under-represented segments of the community fail to respond to opportunities to attend certain live performing arts, or why haven't contributions increased? To some extent this may require an evaluation of the marketing of the service; i.e., people sometimes fail to act because they were not approached in an effective manner. It may require an examination of the general environment; e.g., you cannot attend an event if you lack transportation. It also may require the development of models that incorporate the key variables associated with becoming an arts attender and becoming a contributor. The eventual models will be developed on the basis of multi-dimensional longitudinal and cross sectional studies not only of art users but of the general population of non-attenders. With the advent of such models, local and national policy makers will be in a position to evaluate the extent to which they can shape community use of artistic and cultural opportunities and estimate the cost of alternative programs.

But the beginning of the public policy process is often the identification of community needs. An examination of audience satisfaction and desires together with surveys of the perceptions and desires of the general population can be conducted as part of the community needs assessment process.

In this regard, it is important not to suppose that because a demand has been identified, one has also identifed a public need. At the risk of falling into a semantic thicket, consider the following example. We might discover that there is a segment of the population that could be induced to use a drive-in movie were one to be built. And we might know that the cost of providing this service could not be covered solely by box office revenues, at least not without pricing large segments of the population out of the market. Evidence of demand for, and even use of, such a facility would not tell us how government ought to respond with respect to subsidizing provision of the service. An assessment would have to be

made that government involvement in the provision of the service was in the public interest, perhaps on either or both the externality grounds noted earlier, or because the service was a "merit good."

Many individuals believe that the arts are merit goods, i.e., goods whose production and consumption should be encouraged by public subsidy simply because they are meritorious, irrespective of the public externalities prompted by such support. Advocates for the arts are aware of this and also aware that questions of public needs are ultimately settled in the political arena rather than by the research process. Consequently, arts advocates have sought to use data on public perceptions to advocate certain goals as being in the public interest. In this connection, they are often content to stay at the level of "X percent of Americans think that art is important" as a characterization of public perceptions to which the corresponding goal is expressed as "No American should be deprived of the arts." Such goal statements have limited usefulness in individual policy and program decisions. They are analogous to "America is a nice country" and "no foreigner should be deprived of a visit." In fact, the statements about art may be worse. At least we know what is meant by America. When people say that arts are important, what do they mean by art? and in what respect is it important? and for whom? and how often? and at what cost? and where? Are certain activities more important than others? If you couldn't have both, would you prefer a fully professional symphony or two ballet companies and a museum? Almost anything you could propose would help ensure that some American, somewhere, some way, sometime, got exposure to something that someone called art, thereby helping to ensure he wouldn't be deprived of it.

To the extent that public opinion is important, and subject to caveats noted earlier, it might be helpful to identify the relative importance assigned by the public to "the arts" or particular forms and activities as compared to other public programs and functions. This might be especially helpful when decisions have to be made regarding the allocation of limited public dollars among various competing interests both within the arts community and between "the arts" and other public functions. Multi-dimensional studies would be required should local or national policy makers think it important to sort out local preferences in a way intended to assist decisions regarding specific goals and objectives.

In closing, I want to emphasize that researchers have to be careful when they go beyond reporting findings and attempt to interpret the policy implications. Researchers may be on safe ground when they are content to identify the sorts of questions which can be addressed by their data. But researchers may sometimes not be aware of the responsibility they assume when they go beyond elucidating their findings and make recommendations regarding goals and priorities. At that point, they become advocates for a particular point of view. Whether they want to or not, they've entered the political arena which determines the alternative demands and goals that will be treated as national, state, and local needs.

Footnotes

1 Special thanks to Stephen Gottfredson for his usual helpful comments.

2 In Search of a Regional Policy for the Arts: Phase I and II, The Johns Hopkins University, Center for Metropolitan Planning and Research, 1975 and 1976.

3 Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and Case Study in Baltimore, Research Division Report #6, The National Endowment for the Arts, 1978.

4 Various problems inherent in the identification of audience spending are discussed in an appendix to Economic Impacts of Arts and Cultural Institutions, op.cit.

5 For a discussion of the possible misuse of economic impact data, see Economic Impacts of Arts and Cultural Institutions, p. 29, op.cit.

6 Adopted in 1974.

A Critical Review of the Content, Quality and Use of Audience Studies

Michael Useem and Paul DiMaggio

The purpose of our research was twofold: to summarize information on the composition of the American public for museums and the live performing arts, and to assess the technical quality and the utility of studies of arts audiences. Information was gathered from three major sources. First, a collection of materials from 270 studies of museum visitors and performing arts audiences was compiled from an intensive search of libraries, indexes, and bibliographies; and from over 600 responses to an inquiry mailed to more than 1,200 museums, performing arts institutions, arts councils, and other organizations involved in the arts. Second, directors of 110 recent audience studies, reports of which were received by January 1, 1977, were mailed an extensive survey. The survey forms, returned by 86 study directors, obtained information on study-director background, characteristics of the organization conducting the study, information about the relationship between the conducting and subject organizations, research methodology, and managerial applications of research results. Finally, intensive structured interviews were conducted with directors and users of twenty-five audience studies, selected on the basis of recency, region, and representativeness of the range of institutions studied and type of research undertaken. These interviews yielded data on research applications, the purposes for which studies were undertaken, the manner in which research findings entered the decision-making process, and factors facilitating and impeding the use of research in management and policy making.

The Character of Arts Audiences

The studies from which findings were drawn included data on visitors to art, history, science, and other museums; and audiences for theater, classical music, opera, ballet, and dance. Institutions whose audiences were surveyed ranged widely in size, function, and location. Nonetheless, they by no means represent a stratified sample of American museums and live performing arts organizations. In particular, audiences for ethnic music, jazz, and other popular art forms were not included.

Because different studies asked different questions and used divergent schemes for categorizing responses, comparability was established for categorical variables (gender, educational attainment, occupation, and race) by tabulating percentages of respondents in those categories used in the greatest number of studies. For continuous variables (age and income), comparability was established by calculating median figures for each audience studied. Our findings about the composition of the audiences for which reports were available are as follows:

While the percentage of men and women in the audience surveyed varied widely by art form, overall medians did not differ greatly from the population at large. The median male percentage was 46 percent for museums and 43 percent for the performing arts (compared to 49 percent for the population as a whole). Among the different art forms, audiences for ballet and dance were the most heavily female (60 percent) and visitors to science and history museums were the most preponderantly male (53 percent).

Age. The median age for performing-arts audiences was thirty-five, and for museums it was thirty-one. The median age for the United States' population as a whole is twenty-eight; for Americans aged sixteen or older, it is forty. Among the art forms, ballet and theater audiences were youngest, and opera and symphony audiences oldest. Children were well represented among science and history museum visitors, but largely absent from other audiences.

Educational attainment. Educational attainment appears to be the individual characteristic most closely related to attendance at museums and live performing arts events. Although audiences varied considerably, median educational attainment was in most cases very high relative to the population at large. The median percentage with graduate training was 30; with a four-year college degree, 54 percent (as opposed to 14 percent of American adults); with no schooling beyond high school, 22 percent (U.S. adults, 74 percent); and without a high-school diploma only 5 percent (compared to 38 percent of all adult Americans). Median education was higher for performing-arts audiences than for musuum visitors, higher for ballet and dance than for theater, and higher for art museums than for science and history museums.

Occupation. The most notable findings were the high median percentages of professionals in the audiences surveyed relative to their share of the employed civilian work force, and the rarity of blue-collar workers among attenders surveyed in art museums and the performing arts. Professionals constituted 56 percent of employed persons in the average

Michael Useem is Associate Professor, Boston University, Boston, Massachusetts. Paul DiMaggio is currently a Doctoral Candidate, Department of Sociology, Harvard University, Cambridge, Massachusetts.

audience, but only 15 percent of the employed civilian work force. Visitors to museums other than art museums were less likely to be professionals than any other audience group. Blue-collar workers constituted 4 percent of employed persons in the median audience, as opposed to 34 percent of the employed civilian work force. Blue-collar workers were found in museums other than art museums in substantially greater numbers than in audiences for the performing arts or among visitors to art museums. Students were present in all audience groups in disproportionately high numbers; managers participated in audiences in proportions greater than their share of the population; and clerical/sales workers, homemakers, and the retired and unemployed were slightly underrepresented relative to their share of the population.

Income. Median incomes were adjusted for inflation to constant mid-1976 dollars. The median income for performing-arts audiences was approximately $19,000, or about $4,000 more than the United States average. Median incomes ranged greatly from audience to audience, although almost all were above the national average. Median incomes were somewhat higher for opera, and lower for university and outdoor theatrical productions. Median incomes for museums were about $17,000, with visitor incomes for science and history museums considerably lower than for art museums.

Race and ethnicity. The paucity of information collected on race and ethnicity and the absence of studies of audiences for predominantly ethnic events makes generalization hazardous. Minorities participated in the relatively few audiences for which data were available at rates consistently lower than their share of relevant metropolitan populations. Their relatively low representation in these audiences may be due in part to the fact that minority group members, on the average, are younger, have less education and lower incomes, and work in less prestigious occupations than white Americans.

An analysis of trends in audience composition failed to find significant changes over time. It is possible that change has occurred but was indiscernable because of the relatively few pre-1970 studies available and because of extensive variation among study procedures.

An analysis of frequent and infrequent attenders found that frequent attenders reported themselves to be better educated and of higher income than less frequent attenders, but similar in gender and age. With the exception of intensive theater-goers, heavy attenders in one live performing art form participate intensively in others as well.

An examination of economic impact studies indicated that, while definitive methodologies have not yet been developed, the amounts spent on incidentals by performing arts attenders vary greatly, but appear to have substantial aggregate effects.

Finally, a review of attitude studies indicated widespread public support for the general principal of government aid to the arts, but with support for subventions to specific kinds of arts institutions varying considerably.

The Study of Arts Audiences

Study reports and data from the questionnaires returned by study directors were used to rate the technical quality of each of eighty-six studies. Multiple-regression analysis was used to determine the effects on quality of relevant study characteristics (level of funding, investigator's profession, type of organization conducting the research, prior research experience, and whether the study was in-house or done by an outsider). When the impact of each factor was assessed with all others held constant, level of funding proved of greatest importance, with investigator profession also significantly related to quality. In general, more expensive studies were of higher technical quality, as were those directed by social scientists, other professional researchers, and marketing specialists, as opposed to arts managers. Together these variables explained more than 63 percent of the total variation in quality among the studies assessed. Scales rating each study's utility were then developed from directors' reports. Analysis showed no relationship between the technical quality of studies and their usefulness to managers and policy makers. The only factor with any significant impact was an interaction between two variables: experienced in-house researchers produced more useful research than outsiders or inexperienced in-house investigators. Nonetheless, in contrast to the 63 percent of the variation explained in technical quality, less than 10 percent of study utility was predictable from the variables assessed.

We drew on forty-two interviews of users and directors of twenty-five audience studies to explain the impact of organizational factors on research usefulness and, in particular, to understand the surprising lack of relationship between study quality and utility. In contrast to the conventional viewpoint on applied research, which suggests that institutions undertake research to obtain information needed to make specific managerial decisions, it was found that audience studies were undertaken for broadly political reasons, because an opportunity for relatively cost-free research presented itself, or because of diffuse and general concern about one or more areas of management. Also in contrast to the conventional viewpoint, research was found to enter into decision making in ways that were marginal and indirect. Study findings were marginal in that they were used against a complex background of previously acquired knowledge and beliefs; decisions involved not only rational data-based calculations, but also choices among competing values and priorities; and research was often relevant to marginal problems. The input of research was indirect and difficult for interviewees to assess precisely because study findings were less often used to solve problems than to catalyze action into a broad managerial area, to symbolize commitments to particular priorities or concerns, or to identify problems as they arose.

Nonetheless, once completed, audience studies were found to be highly useful to managers. For the twenty-five studies assessed, seventy-seven applications or outcomes were mentioned, of which two-thirds were primarily instrumental and one-third principally related to internal politics (e.g., legitimating managers' decisions) or external politics (e.g., lobbying or fund-raising). The greatest number of applications (29 percent) were for physical planning, followed by internal politics (22 percent), marketing (20 percent), research (12 percent), external politics (12 percent), and program or exhibit-content planning (6 percent).

In general, audience studies had powerful effects when their findings confirmed the suspicions of arts managers; when an influential person within the institution actively sought implementation; when the authority of outside researchers lent legitimacy to their feelings; and when researchers were involved on a sustained basis in staff deliberations. Studies failed to make an impact when there was high staff turnover; when influential individuals were hostile or indifferent to the research; when organizations lacked the resources to use the findings; and when

study reports were confusing or perceived as trivial or inconclusive.

Little concern was evinced for research technical quality. While the lack of connection between technical quality and utility to some extent reflects a lack of training and experience in research methodology, the willingness of arts managers to use the findings of research that does not meet conventional technical standards is in large part a rational response to three aspects of the environment in which arts organizations function. First, most arts organizations have too little time, money, or experience to undertake or sponsor high-quality research; second, most arts organizations have virtually no systematic information about the composition, attitudes, or habits of their audiences, so that any increment in knowledge can be valuable; finally, lack of concern with technical quality reflects a recognition of the way in which research findings enter into the decision process: as marginal, indirect, reinforcing, suggestive, expressive, or symbolic inputs that depend little on the precise technical methods employed.

Workshop Tutorial: Improving Audience Studies

Moderated by Hugh Southern, Executive Director, Theatre Development Fund, New York, this workshop was devoted to basic issues underlying the design and implementation of audience studies and the analysis of resulting data. Panelists were Michael Useem, Paul DiMaggio, and David Cwi.

The workshop began with presentations by the panelists regarding practical issues in the design, staffing, implementation, and analysis of audience surveys. While the workshop was intended as a tutorial for conferees with little or no experience in conducting audience surveys, it quickly became apparent that the majority of those attending were associated with arts institutions and had previous experience in conducting audience studies. Conferees showed some interest in improving their technical understanding of audience studies, but they were especially interested in comparing experiences with others in the workshop. While participants indicated that audience studies are becoming a standard practice, many seemed unsure as to whether the information gathered was worth the effort, time, and other resources expended. These individuals had attended the workshop in the hope that case studies would be presented to identify techniques and information from the standpoint of the various organizational purposes for which it was valuable. In particular, participants were concerned with the role of audience studies in the development, of the institution's marketing plan, considered as the plan by which the institution could increase it visibility in the community, its level of contributions income, and its ticket sales.

Dinner Program: Research and public policy

The conference brought together researchers, arts administrators, working artists and public officials--an eclectic and exciting mix of resources and points of view. By the close of the second working day, conferees had come to know one another personally and had begun the critical discussion and exchange of information central to the success of any conference. The dinner event enhanced this natural conference process, while the dinner itself was exciting and elegantly executed in the magnificently restored banquet hall of the former Belvedere Hotel. Introduced by Francis D. Murnaghan, Jr., President of the Board of Trustees, the Walters Art Gallery, each of the dinner program speakers addressed one aspect of the role of research in the development of public policy.

Information and Politics

The Honorable William Donald Schaefer, Mayor, City of Baltimore

The dinner program began with welcoming remarks by The Honorable William Donald Schaefer, Mayor, The City of Baltimore. Mayor Schaefer called attention to the wealth of cultural resources located in the city, and noted that they had evolved historically due to the efforts and philanthropy of a few individuals. In turn, the Baltimore City has responded so that today it is among the leading cities nationally in local governmental support for artistic and cultural activities. Mayor Schaefer emphasized that the city's award winning and nationally recognized urban renewal efforts required an equal emphasis on assuring the amenities needed by a truly alive and cultured city. However, he also emphasized that in the conflict of priorities and public needs, it would be increasingly difficult to increase public funding of the arts unless the supporters of these activities came forward to argue the case for public support. Certainly, the availability of accurate information on the needs and impact of these activities was important, but from the view of public officials, it needed to be complemented by evidence of public support for arts appropriations.

Information and Policy Goals

The Honorable Clarence D. Long, U.S. House of Representatives

Mayor Schaefer was followed by Congressman Clarence Long, member of the House Interior Appropriations Sub-Committee, which reviews the Arts Endowment budget. He is from the 2nd Congressional District, Maryland.

Congressman Long's informal remarks focused on the broader goals of programs of public support for the arts. He noted at the outset that the arts--whether the development of new art forms and activities or the preservation of the old--have always been subsidized. In particular, artists themselves have implicitly subsidized the arts by accepting a lower standard of living as compensation for their commitment and contribution.

Congressman Long did not believe that artistic development could be left totally to the market place. If artists were forced to respond to the market place, their activities would reflect the hard realities of market economics which dictate that "competition meets in the middle," i.e, directs itself toward the largest share of the market. Consequently, artistic production would tend to be conservative. Subsidy was needed if only to assure innovation.

At the same time, the Congressman cautioned that there was a natural tendency for public subsidy to go to those with power and "know how"--organizations that are already famous with an established private sector constituency and adequate resources--rather than to organizations and areas in real need.

In this connection, the Congressman suggested that the Endowment had yet to formulate its goals, but was putting out dollars "in all directions." In particular, he saw the need to identify whether the basic philosophy of the Endowment was to help the best get better or to "raise the whole average" by helping those currently below average. Congressman Long emphasized that, since we cannot predict "who will be great," public policy should not set qualification standards geared to protecting against failure and, consequently, cut off from support individuals and organizations that might later come to make substantial contributions.

Believing that "art is the most enduring element" of a civilization, the Congressman expressed the need for the continued development of the National Endowment and the utilization of research findings in the development and evaluation of agency programs.

The Policy Makers' Need for Research Information

Livingston L. Biddle, Jr., Chairman, The National Endowment for the Arts

The formal remarks of Livingston L. Biddle, Jr., newly appointed Chairman, The National Endowment for the

Arts, highlighted the evening program. The speech represented the first major policy address by the new Chairman and served to further emphasize the importance that the Endowment had begun to place on the activities of the Research Division. Chairman Biddle's address is reprinted below.

No single area more clearly demonstrates the changes at The National Endowment for the Arts than the work of our Research Division. In earlier times, priority was placed necessarily on other areas. In those days, there was a skeptical attitude nationally toward directly funding artists and arts organizations, while the lack of funds made it difficult to address critical needs.

This conference represents a real maturing of the Arts Endowment. We now recognize that our thinking has to go beyond the time span of a few years. We must fully understand all needs in the arts, and we must have better information in order to set priorities and make decisions.

Our change in attitude is appropriate given the development of the arts community and the Endowment. In recent years the arts have grown tremendously. We have twice the number of symphonies and opera companies, four times the number of resident theater companies, and seven times as many dance companies as we had at the Endowment's inception. Moreover, during this same period the Arts Endowment itself has grown from a budget of less than $2.5 million to one of more than $115 million. The Endowment now spends a significant amount of public money, and the impact of these funds on artists and their institutions is correspondingly increased. This expansion in the arts and in government support for them puts a new value on research. Legislators and arts administrators alike are faced with increasing public demand for the arts. In responding to this demand they must deal with questions of accountability, evaluation, and long range planning.

Today, researchers are beginning to make information available that is essential to the Arts Endowment. Our supporters are looking for evidence that programs work, and work effectively. We need a continuing judgment about our relationship to all aspects of the arts and about the effectiveness of funding at different levels of government. We need to know about the ways in which we are meeting our program goals and about alternate strategies in our planning. All require a solid basis in the best available data.

A good example of our need for information can be seen in the questions raised by the Office of Management and Budget at our recent hearing. These were among the questions they asked:

--What should the arts sector of the economy look like in normative terms?
--What is the optimum mix of sources of income to support the arts?
--What does research indicate with respect to elasticity of demand for the various arts disciplines by socioeconomic status?

We need to answer such questions with the fullness of information they deserve.

Research is important to the Endowment not only for internal program planning, but to enable us to speak for the arts to other goverment agencies. Governmental programs have a significant impact on the lives of artists, through policies in areas such as taxation, unemployment, jobs, and health and welfare benefits. The more information that is available, the more the Endowment can work with other agencies in areas that affect the arts.

Good hard information in the arts is important, then, to Congress, the Arts Endowment, and other federal, state and local agencies. But there are also many other current and future constituencies to be assisted from established arts organizations to newly developing groups. Because these demands will continue to grow, I think we need to broaden the base for support of arts research in order to involve other agencies, institutions, public interest groups, and universities in commissioning work in the field.

This work needs to concern itself with the kind of basic information which, say, agriculture, transportation, or housing can command. The standard economic series have paid little attention to the arts in the past, and, as a result, we know less than we should about such fundamental matters as attendance and ticket sales, earned income, and operating expenses for the performing arts. In each area of the arts we need a full range of input-output data; we need to know a lot more about the geographical distribution of the arts as a major national activity; we need long-term continuity for all our data.

I recognize that useful work has already begun. Of course, we are all greatly indebted to the Ford Foundation surveys, and there are service organizations which have begun collecting very important data in their particular areas: Opera America, The American Symphony Orchestra League, Theater Communications Groups, and The Association of American Dance Companies are among these. Also, I think the Endowment's Museums U.S.A. study is a real contribution to the assemblage of important information. Within the Endowment, we are concerned about making our own data more accessible to research through computerization, and the Research Division is moving towards an annual data series which would use the grant application process as a means of data collection.

Ideally, our work would be of help to many agencies, public and private, but as yet we have not often been able to match that intent with action. Some of the research done by the Arts Endowment has been of use to the states, for example, and we want to go further in that direction. We are working and want to work increasingly with the states, especially through the National Assembly of State Agencies, to approach research problems in a way that combines state interests with our own needs on the federal level.

However, as we move to improve our research and gather needed information, we need to keep in mind some difficulties. Even the most rudimentary kinds of data collection immediately raise questions of definitions and sampling techniques which need to be worked out. I hope that researchers can respond to existing disparities by developing greater uniformity in the research language and techniques by which they describe arts activities. But researchers can distort our point of view even when there is agreement on definition and procedures. For example, facts and figures about the arts as a

major national industry seem to bring their importance to people in a special and convincing way. In showing how the arts are focal points for economic activity, they become more visible and related to the everyday life of the community. While we pursue this line of research and show the place of the arts in our economy, we need always to keep in mind that the core purpose of the arts is not economic. Economists doing research for the Arts Endowment have made a special point to remind us not to lose our perspective. Economic impact statements are one interesting, valuable, but essentially limited element in the information needed for arts advocacy and for sound policy decisions.

One of the greatest challenges to research in the arts is to meet the needs and problems of individual artists. Here the information is much harder to obtain than it is for institutions. The links between a grant, its impact, and the needs which stimulated that grant are much easier to pin down for an arts institution than they are in the case of an individual artist. How do we effectively spend money on individual artists? This is a difficult question, but one you can help us answer by providing imaginative methods for gathering and analyzing the information we need.

Now, although I have been advocating a great deal more research, I would also like to say that some thought must be given to simplifying the demands being made on arts institutions. More and more they are plagued with surveys which make increasingly difficult requests for data. Here again, if researchers can correlate their efforts and their techniques, the result will be data that is more useful. It will also mean relief for the arts institutions from burdensome, repetitious questions and requests for data too remote from their everyday concerns. One of the key elements, then, in developing the field of arts research must be better communication among researchers and better dissemination of readable and understandable research to the general public. We need more publications and newsletters; and we need the kind of coordinated effort a conference like this one can provide. I see this conference as an attempt to create a whole series of ways by which researchers in the arts can keep in touch with each other and can work out in professional and expert ways the problems inherent in the field. The federal role, as in other aspects of arts support, should be as a catalyst to help stimulate non-federal endeavors.

One of the great pleasures of the Arts Endowment in recent years has been in the high quality and in the variety of organizations now interested in research in the arts. Many of the researchers we assist are quite new to the arts world, and we are delighted with that fact. A glance at the program of this conference shows that the call for competitive proposals has resulted in a wide range of responses, from large academic centers to small independent research organizations. This is yet another sign of the increasing importance of arts research.

And so I see this conference as something of a milestone. The twenty presentations being made here are worthy in themselves. They represent the sort of work which needs to be done and which is going to be done in the future. They also stand for the clear recognition by the Endowment that we must develop an effective data base for making increasingly complex decisions. Good research helps us toward sound decisions for a healthier arts community. In this, we are at the beginning of new discoveries, and of developing techniques for the arts in keeping with their significance, which has the deepest kind of meaning for us all.

Research on Artistic and Cultural Institutions

Session Chairman:
Richard Sheldon
The Ford Foundation

Economic Data on the Arts: Current status and possible improvements

Dick Netzer

Virtually no one concerned with the arts in the United States has ever been satisfied with the information available on the economic and financial characteristics of the arts in general, for specific art forms and types of cultural institutions, or for specific regions, states and cities. This is nothing new, but dissatisfaction has grown since the creation of the National Endowment for the Arts a dozen years ago marked the acceptance of a larger and more direct role for the Federal government in support of the arts.

This dissatisfaction does not merely reflect the peculiar American proclivity for facts and figures, but the very real needs for information in making sensible policy decisions and managing arts institutions. Members of Congress, in authorization and appropriations hearings, repeatedly raise questions that cannot be answered on the basis of the available data; advocates for the arts and arts journalists pose still other questions that should be readily answerable but are not; boards and administrators of arts organizations lack all sorts of comparative data relevant to their operations; and researchers, as always, find the gaps in the data huge and disabling.

There are some obvious and understandable reasons why economic data on the arts are far less adequate than the data on other aspects of American social and economic life. First, the best Federal government economic statistics are for the sectors that have long been "clients" of the Federal government, with major, well-established Federal agencies devoted to their welfare; agriculture, transportation, and housing are notable examples. In contrast, the arts have not been an object of Federal policy until quite recently, and the Arts Endowment remains, by Federal standards, a very small agency.

Second, Federal economic statistics in general are good at covering activities organized on a commercial, for-profit basis or conducted under governmental auspices, but rather poor at covering activities organized on a non-profit basis or by people working on a self-employed basis. Film, the Broadway stage, and broadcasting aside, most of the activities that we ordinarily refer to as artistic and cultural are conducted by non-profit organizations or individuals working on their own. Moreover, art as an "industry" is a relatively small one (accounting for only about one percent of gross national product, even if broadly defined), so that the arts easily fall between the cracks in the standard Federal statistical series.

Third, artists and those who run arts organizations are not statistically-mind policy analysts, nor should they be. Rightly, they concern themselves mainly with artistic creativity and artistic output, not with statistical reporting on their own activities or those of their counterparts. Thus, they have not organized themselves into counterparts of the heavily-financed, statistics-producing trade associations characteristic of corporate business. Arts service organizations are relatively new ventures, with slender financing and (with one exception) no tradition of concern for the production of economic data.

In recent years, there have been serious efforts to improve the economic data on the arts, but on a rather unsystematic basis. Several of the service organizations, following along the lines pioneered much earlier by the American Symphony Orchestra League, have begun to collect data annually on the operations of their members. There have been a number of major, but non-recurring, statistical studies of museums and the arts in individual states. The Ford Foundation conducted a major study, covering a nine-year period, of the finances of the major professional performing arts organizations. There have been marginal improvements in the treatment of the arts in standard Federal economic statistics.

The Arts Endowment has been involved, financially or otherwise, in most of these efforts to increase the supply of economic data on the arts. However, in the past two years, that involvement has been more deliberate and systematic. The study that this paper reports is part of the new effort to assist the Arts Endowment in making decisions about the Endowment's future role in the development and improvement of economic data on arts and cultural instititions.

Our task was to systematically review and evaluate all existing sources of data of nationwide scope and recommend action to correct the deficiencies revealed. A crude summary of the adequacy of the existing data available to users (that is, excluding

Dick Netzer is Dean, Graduate School of Public Administration, New York University.

data buried in agency files), using criteria such as coverage of the universe, data items included, and continuity over time, is found in Table 1. In our view, there is a modicum of adequacy (and not much more than a modicum) only for the large non-profit traditional performing arts organizations. Otherwise, the data available to users range from sketchy (e.g., for the commercial theater) to nonexistent (e.g., for nontraditional performing arts).

However, to say that the accessible data are deficient is not the same thing as saying that potential users of data find themselves crippled. Of course, sophisticated researchers and policy analysts complain bitterly, but our survey of the people who are running programs, operating arts organizations and making legislative decisions, did not disclose a widespread passion for great volumes of additional data. In fact, most of our respondents began with expressions of doubt that there were major unfilled data needs, but continued by pointing out quite specific ones. Although our respondents seemed to perceived their own limited needs as the only ones not being satisfied, the sum total of those individual needs could be met only with major data collection, tabulation, and publication efforts.

Thus, we concluded that a substantial improvement in Federal government data collection for the arts should be made, and recommended a recurring program estimated to cost approximately $300,000 annually. The primary target for the data improvement effort should be the development of a system of recurring, reliable, and fully comparable statistics on the finances, inputs, outputs, and prices of each of the art forms for which production is done through organizations (rather than on a highly individualistic, largely self-employed basis). The secondary targets include the improvement of data on individual artists' employment and income and data on public-sector arts activities. Improved data on arts organizations are seen as the primary target not because individual artists' activities are unimportant, but because, necessarily, the great bulk of artistic production is done through organizations and the great bulk of public funds devoted to the support of the arts must take the form of grants to arts organizations.

In summary, the features of the economic data system for organizations that we recommended are as follows:

A. Coverage and frequency

1. Large arts organizations (essentially, all fully professional organizations in conventional art forms): develop universe-based annual surveys with detail at least equal to Ford Foundation surveys.

2. Smaller organizations and unconventional art forms: develop sample-based annual estimates for selected financial and operational totals. Surveys should be designed to yield nationwide totals of income, employment, and attendance (with limited detail within these categories) for all the arts combined and for individual major art forms.

3. Universe-based detail for all arts organizations should be collected every five years in order to provide benchmarks for the annual estimates in 2, above, and to permit considerable geographic disaggregation.

4. There should be no attempt to collect data more frequently than once a year, but "flash" surveys, as exemplified by the Project in the Arts, should be continued to assure up-to-date information on annual trends.

B. Mechanics

1. Tabulate raw data in grant applications (and supporting schedules) the the Arts Endowment--after making those schedules uniform among programs, and rely heavily on these data as the basic source of annual information on the non-profit arts.

2. Conduct an annual survey of the commercial theater's "large organization" side (i.e., Broadway and the Road) to provide detailed information on this sector.

3. Utilize the Census of Selected Service Industries, suitably improved, to provide most of the quinquennial data for smaller organizations, supplemented by special-purpose surveys of arts organizations excluded from Census coverage even after that coverage has been appropriately expanded.

4. Employ the service organizations only in a limited capacity, notably to encourage member response and assist member organizations in completing forms; but if such members agree, supply service organizations with copies of member's submissions for service organization use and for dissemination of specialized information applicable only to a specific art form.

It is worth emphasizing that we propose considerable detail on operations data, closely matching the detail proposed for financial data, so that changes in the financial magnitudes can be linked to changes in attendance, prices, employment, and salaries. It is also worth emphasizing our conviction that the Arts Endowment itself should take primary responsibility for operating the proposed data system. Heretofore, the Arts Endowment has either given grants to service organizations, thereby subsidizing several uncoordinated, albeit earnest, data collection efforts of varying adequacy, or spent very large amounts for occasional one-time surveys.

The system proposed focuses on art organizations. What about the secondary targets, i.e., better data on individual artists and public-sector arts activities? In our view, these targets call for improvements in the data-collection efforts of other Federal agencies: the Census of Population, the Census of Governments, etc. This requires that the Federal statistical agencies for whom the arts are a minor side-show be goaded, encouraged and assisted by the one Federal agency for which the Arts are everything: the Arts Endowment. Therefore, we recommend strongly that the Arts Endowment take on, explicitly and consciously, the task of continually pressing others to improve data on the arts. This does not require major Arts Endowment expenditure, but it does require that some staff time be specifically allocated to this assignment.

As more economic data on the arts become regularly available, art-world users of these data no doubt will become increasingly more familiar with them and increasingly more adept at interpretation and analysis; moreover, the availability of data will induce more researchers and policy analysts to devote more attention to the arts. However, because there is little present familiarity with economic data on the arts, users will need help in handling the new data. Essentially, the forms in which the new data are presented and disseminated must include enough easily comprehended interpretative material to make the data truly accessible to unsophisticated users. At the same time, the new data should not be presented in such summary form that material useful to the sophisticated is suppressed or available only upon special, frequently rejected and costly request.

The reports on the Project in the Arts survey are,

perhaps, the right prototype for interpretive material on arts data for the general art audience. Thus, we envisage an interpretative discussion of findings, done within or by contract with the Arts Endowment, as a necessary introduction to any and all publications containing the data recommended in this study. A possible publications schedule would include separate annual reports on each of the major art forms; an annual compendium repeating the tabular content of the separate reports and providing totals across art forms and whatever geographic disaggregation is feasible; and an expanded version of these reports in the quinquennial Census years. We note, explicitly, that Census of Selected Service Industries data must not be permitted to languish in Census of Business reports, unknown to everyone except the few analysts who are familiar with the buried treasure of "Selected Subject" reports. Instead, the Arts Endowment itself should publish, and promote the distribution of, reports containing the data.

It is worth making explicit the importance of including in standard publications as much of the data as possible. Analytic as well as informational uses of the data are minimized by publishing nothing but skeletal summaries with a footnote mentioning that special tabulations are available upon request. Once the decision to invest in a good system of economic data on the arts has been taken, the cost-effective corollary is surely to publish everything not subject to confidentiality requirements, and to ensure that the publications circulate as widely as possible.

Table

AN IMPRESSIONISTIC CHARACTERIZATION OF EXISTING DATA ON THE ARTS AVAILABLE TO USERS

(Ranked on a scale of 0-5, in terms of coverage of the universe, data items included and continuity over time:
5--excellent
4--adequate in nearly all relevant respects
3--adequate in some, but by no means all respects
2--limited data for some activities, characteristics and time periods
1--very sketchy data for a few aspects
0--virtually no data)

3	2	1	0
Non-profit traditional performing arts, large organizations	Commercial theater	Non-profit traditional performing arts, small organizations	Other (mainly nontraditional performing arts)
	Museums	Individual Artists	
	Financial supporters of the arts		

Problems and Issues in the Development of an Econometric Model of the Performing Arts

Harry I. Greenfield and Samuel Schwarz

This study sought to construct an econometric model for analyzing the economic behavior of the non-profit performing arts, as well as to assess the model's data requirements in the context of the NEA's interest in developing an economic data series on art and cultural institutions. Our task was complicated by the poor quality or short-term nature of available data. However, extensive raw data has been collected for a number of years by the American Symphony Orchestra League. By drawing upon the data collected by the ASOL, we believed it possible to come close to obtaining all the variables of interest. Consequently, we created a detailed aggregate data base for seventeen major orchestras spanning a quarter century (probably the first of its kind in the arts field) utilizing ASOL data. This symphony data base was used to refine and develop the model reviewed below. Crucial to understanding this model is our revision of the traditional approach to the analysis of the non-profit "earnings gap."

Ever since the path breaking work of Baumol and Bowen, the focus for the analysis of the performing arts has been the "earnings gap," the difference between expenditures and earned income. It has been taken as a

> ...fact, well known to professionals in the field, that the labor-intensive performing arts, whose productivity cannot keep pace with the ever-increasing productivity of the industrial economy in which they exist, are faced with an ever-increasing gap between their operating costs and their earned income. The costs, principally wages, are set by the cost level of the economy; the earned income is limited by the inherent limit on the number of performances live performers can give and the number of seats in halls.[1]

In light of this approach, analysis of the past and projections into the future have been based upon measures of the "rate of growth" of the earnings gap. Although it has sometimes been pointed out that "the growth was also the product of more sudden changes in which organizations or art forms operate,"[2] it was assumed that the fluctuations from year to year and from one group of years to another, "occur around an underlying, steady trend."[3] One question has never been faced head on: Is the "gap" we are measuring today the original gap plus its natural growth, or is it a different gap?

The problem will be understood with a simple example. Suppose an arts organization which has 10 weeks of performances annually with expenditures of $50,000, earned income of $40,000, and a gap of $10,000, doubles its season to 20 weeks and, for the sake of simplicity, its expenditures increase to $100,000, earned income to $80,000, and gap to $20,000. Our study documents the fact that this was a major problem faced by orchestras during the '60's in that the earnings gap increased as a result of an increase in the level of output. Two situations must be distinguished. The earnings gap may grow when output is constant but input costs, for example, player wage rates, increase. But an increase in the gap may be due to a movement to a higher level of output, with the same input costs. Failure to make this distinction when projecting future trends can produce seriously misleading results. This is our first conceptual innovation in the analysis of the economics of arts organizations.

In order to analyze the behavior of non-profit organizations, it is also important to understand that these organizations receive contributions income as well as earned income. Further, the organization must balance its budget on a long run basis. The organization can balance its budget by influencing earned income, expenditures, and contributions. Given demand conditions, it controls earned income directly by the price it charges for its services, and it can influence contributions by its level of solicitation and overall financial condition.

Expenditures are the product of the level of output and the cost of each unit of output. Both are determined by management in conjuction with labor. Wages in the arts consist of the wage-rate per pay-period, and the number of pay-periods per year, the latter determining the level of output.

More fundamentally, however, any increase in the

Harry I. Greenfield is Professor of Economics, Queens College of the City University of New York, and Senior Research Associate, Center for Policy Research, Inc. Samuel Schwarz is presently a Ph.D candidate at Columbia University, New York.

"earnings gap" must be matched by an equal rise in contributions. For over the long run, the "earnings gap" is simply the other side of the coin of "contributions." Thus, whether it is the case that contributions increase first, then draw up wages, or the reverse is the case, the two must go hand-in-hand. For an increase in the "earnings gap" without matching contributions is a deficit which cannot go on indefinitely. Consequently, to study the growth of the "earnings gap" one must study the growth of "contributions." If contributions grow slowly, the growth of the "earnings gap" must also be slowed through large price increases and/or small wage increases. No longer is the "earnings gap" the "residual" after expenditures and earned income are determined along with wages, the level of output, and so on. By being able to dissect the growth of the "earnings gap" into its various components, in the context of a unified system, one can get a fuller understanding of its past behavior as well as more reliable projections for the future. This basic framework of analysis constitutes the major conceptual innovation of our study.

We have a system, then, where earned income, output, contributions, the price charged for services, and the wages of employees are simultaneously determined, subject to the non-profit budget constraint. Consequently, a change in any component is not an isolated event, but must also affect other components in order to bring the system back into balance. Our mode of analysis allows us to analyze the system as a whole as well as the behavior and determinants of every component of the system.

While the exact behavior of the system varies by art form as well as for the same art form over time, our major findings as applied to the seventeen examined symphony orchestras are as follows.

(1) The behavior of the system we modelled was in great part determined by institutional phenomena which cannot be quantified and which change over time. Thus, for example, the examined orchestras exhibited very passive behavior during the '50's with a "natural" growth of the earnings gap; while the '60's, mainly as a result of union power and the Ford Foundation Symphony Program, was a period of unusual growth in the length of season (hence, output), and a relative rise of orchestra players in the hierarchy of worker wages. Also, some of the variables exhibited constant behavior or a steady trend. Consequently, the data did not lend themselves to regression analysis (same for the ticket-income equation) but rather to careful analysis in the context of the simultaneous determination of a unified system.

(2) The Ford Foundation Symphony Program had two additional effects on the finances of the major orchestras which have important policy implications. First, its matching-funds requirement forced the orchestras to increase immensely the level of regular contributions they received, demonstrating that arts organizations can influence the level of contributions. Second, the orchestras began depleting their endowment principal to cover deficits at roughly a constant annual rate for the last decade. This raises the question of whether a permanent income to the arts can be created by setting up an unrestricted endowment fund.

(3) The evidence confirmed our basic contention that, in our system, everyone is controlled by the non-profit budget constraint. Thus, for example, in the early '60's management was forced, under increasing wage pressures, to increase ticket prices at a greater rate than the price level; while in the early '70's, labor learned that the real weekly salary could no longer rise, even though it meant that their position relative to manufacturing workers was falling.

Based on our model, we have developed an approach to forecasting involving a system of "informed" extrapolation, i.e., extrapolation of past trends with adjustment based on our "prior knowledge" of the system. Thus, for example, in forecasting expenditures for our set of major orchestras, it should be noted first that nearly all the orchestras have a full season. Therefore, the wage bill of players can increase only through an increase in the compensation per week. One would then develop a set of possible trends in wages based on past trends, conditional upon different states of income to the orchestra. This would yield a set of conditional forecasts for wage expenditures. The same would be done for the other variables, again getting conditional forecasts. These would then have to be grouped together in the context of the unified system, so that, for example, a forecast for small increases in total expenditures conditional upon the same for income would have to be paired with forecasts for small increases in contributions and earned income.

The forecaster would then have a set of possible forecasts for the system, based on "prior knowledge," and he would be able to rank these possibilities based upon current "expectations" in the arts field. This would require a "resident" forecaster who would be well versed not only in past trends and forecasting methods but also in the current expectations and rumors in the arts field.

The data needs for an analysis based on our framework are as follows:

Type I. Total earned income, expenditures, and contributions are the minimum necessary for documenting the "earnings gap" and tracing major movements in any art form.

The following additional data types identify the level of detail required for analysis and forecasting along the lines set out above:

Type II. (1) To determine total wages, it is necessary to include players' average wage-rates per pay-period, the number of players, and the number of pay-periods; (2) To determine earned income, the average price charged for tickets, the number of performances, and the number of admissions (where services are contracted, the charge per service and the number of services) should be included; (3) To determine unearned income, a breakdown of total contributions into major components is required.

The following are useful and important:

Type III. (1) A series of prices charged, i.e, low price, high price, etc., as exemplified by the Ford Foundation data set, will enable a correction of the average "realized" price for changes in demand for different types of tickets; similarly for wages, if there has been an appreciable change in the number of players (otherwise, this is optional); (2) The number of weekly services, e.g., the number of performances and rehearsals required of players, will provide a better measure of wages and output.

Type IV. More detailed breakdowns and information, such as of the components of expenditures, are sometimes used to verify required data or to clarify questions which arise.

In addition to our symphony data set, our experiences in collecting and analyzing the annual reports

of a sample of museums has taught us that even from these simple reports one can obtain Type I data, and some Type II data for a subset of this sample. At the same time, this requires an immense editing job since different organizations have different and very complicated bookkeeping schemes.

Our experience with the Ford Foundation data clearly indicated that, despite its span of only nine years, it is the most valuable data base available on the non-orchestral performing arts. At the same time, even this detailed data base can lose much of its value for purposes of analysis and forecasting if it lacks a key variable: the player wage-rate. Fortunately, since it is a recent period, this can hopefully be remedied by obtaining a wage series from other sources, such as union files.

Based on our study, we made the following recommendations to the NEA with regard to future research and data collection.

The NEA can proceed with some or all of the following possible paths:

1. Set up a forecasting system for the major orchestras based on our outline of such a system. This could include further analysis of major orchestras.

2. Conduct analyses of other art forms using our framework of analysis. The NEA could begin by using the Ford Foundation data in conjunction with a player wage series, which would have to be independently created using other sources of information. Further work could be done if data covering a longer time-span are collected. At least our Type I data should, and probably could, be collected to give an overall picture over a longer period. For museums, it is the only possibility given extant data.

Further, an analysis similar to ours could be conducted to examine the minor orchestras, using ASOL data. Subsequently, a forecasting system could be set up for these other institutions and art forms.

3. Set up a data collection system to create a permanent data base on arts and cultural institutions, together with a proposed "sample" check for error. We have previously outlined the data needs ranked by priority. The collection of the lower-priority data would have to be determined in conjunction with other studies of the costs involved. A final permanent data set and procedures should await at least the initial results from a study of other art forms.

Footnotes

1 The Finances of the Performing Arts, Vol. I, The Ford Foundation, New York, 1974, pp. 7-8.

2 Ibid., p. 87.

3 Ibid., p. 91.

Using Econometric Models to Forecast the Impact of Economic Conditions on the Operation of Artistic and Cultural Institutions

Robert T. Deane and Ibrahim A. S. Ibrahim

Introduction

Applied Management Sciences was awarded a contract in September of 1976 from the National Endowment for the Arts with a very broad mandate. Not only were we, within a period of six months, to model a variety of institutional types, but we were also to acquire all of the available data pertaining to these institutional types (and identify and document data gaps in the process), edit the data so as to be suitable for use in model parameter estimation (i.e., regression analysis), use these data to empirically test the models, and offer recommendations regarding what we felt to be the most fruitful future research activities.[1]

Traditional economic theory is not well suited to handling the behavior of non-profit institutions. In the case of our project, the key element in developing a conceptual basis respecting the behavior and reactions of these institutions (or, more properly, their managers) was the input of an expert advisory panel, composed of Mr. Thomas Fichandler, Executive Director of the Arena Stage; Mr. James Morris, Director of the Division of Performing Arts at the Smithsonian Institution; and Mr. Donald Nicholas, Deputy Director of the Virginia Museum of Fine Arts.

This project succeeded in (1) developing full-scale conceptual models for each institutional type (each containing approximately thirty equations); (2) examining available data to identify gaps as well as the data most useful for empirical research; (3) estimating as many equation parameters as data would allow; and (4) exploring alternatives to econometric modeling. Before describing the research findings relative to the behavioral (econometric) models, however, our experience with the trend modeling requires discussion.

Trend Modeling

As an alternative to behavioral modeling, a sophisticated trend modeling approach was employed: a Box-Jenkins technique, which combines the influences of autocorrelation with moving averages. It was thought that this technique would lead to simply-obtained short-run forecasts of key policy variables. It was found, however, that this technique was difficult to implement and required a great deal of subjectivity in its application. Thus, the forecasts could not be expected to be consistent among researchers using the same data series, nor could one inexperienced in econometrics or statistics be expected to implement the process. For these reasons, it was concluded that this particular form of trend forecasting could not be considered a viable alternative to behavioral modeling from the point of view of the Arts Endowment. There may be other trend modeling techniques which are, but they were not within the scope of this study.

Research Findings

The remainder of this paper will be devoted to the discussion of selected research findings and recommendations as condensed from the full 280-page report to the Arts Endowment. These findings represent empirical results from the behavioral modeling together with our findings regarding data base availability and quality. The empirical analysis utilized a total of six separate data sets:

- --a data set for For-Profit Theater (Broadway), developed by Applied Management Sciences;
- --data sets applicable to Non-Profit Theater, Opera, Symphony, Ballet, and Modern Dance, provided by the Ford Foundation;
- --an updated Non-Profit Theater data set provided by Touche Ross & Co., based on Ford Foundation
- --data and Theater Communications Group records; Museum time-series data acquired from individual museums and the Smithsonian Library, through the joint efforts of Applied Management Sciences and the Center for Policy Research; and
- --a cross-section data set for Museums supplied by the National Research Center for the Arts.

The most comprehensive and consistent data sets were found to be those supplied by the Ford Foundation. These data, while not covering the entire set of variables specified in the conceptual models, nevertheless satisfied the requirements for preliminary model estimation for Non-Profit Theater, Opera, Symphony, and Ballet. The main deficiencies were found to be in the limited 9-year span covered, and the inadequate representation for Modern Dance. In any event, the

Robert Deane is the Director, and Ibrahim A. S. Ibrahim was a Project Analyst, Economic Analysis Division, Applied Management Sciences, Inc., Silver Spring, Md. Dr. Ibrahim is presently a Senior Associate, CACI, Inc., Arlington, Va.

Ford Foundation data were well organized, edited for consistency, and provided in usable form. Any attempt to systematically update this data base would prove to be extremely valuable.

The attempted partial update by Touche Ross using the Theater Communications Group data proved to be inadequate in light of the initial incompatibility of the two data sets. Perhaps, if more time and resources had been provided to Touche Ross, the necessary editing could have been accomplished, but it is probably the case that only the Ford Foundation, or an organization working closely with the Ford Foundation, can successfully update this data set in a strictly comparable fashion.

An alternative to updating the Ford Symphony data base can be found in the use of the American Symphony Orchestra League (ASOL) records. These records are rich in detail and number of symphonies. Thus, an effort to develop a data base for symphonies using ASOL records would be valuable, both in terms of the time span and variable coverage.

The data sets which will require the most effort to develop are those for For-Profit Theater and Museum. The data set acquired for For-Profit Theater suffers from a lack of adequate cost and capacity data. Efforts to remedy these deficiencies, while demanding in terms of resources, are, nevertheless, feasible, as was demonstrated by Dr. Moore's analysis of the cost data for selected years.[2] The deficiencies in the capacity data could also be remedied through the analysis of theater records.

The Museum time series data proved to be inadequate because of the lack of standardization in financial statements, both among museums and, over time, for individual museums. Definitions of accounting items vary, as do allocations of costs and revenues. In addition, different levels of detail are provided. Further, important data items, e.g., attendance, are missing from the records of most museums. An effort to remedy the deficiencies in this data set is likely to be expensive (comparable to the Ford Foundation effort), but is absolutely necessary if meaningful analyses of the several types of museums are to be undertaken.

The Museum cross-sectional data were used to estimate most of the Museum conceptual model. However, the purely cross-sectional nature of the data required the modification of the model to eliminate the need for past information, i.e., lagged values for the variables and most first differences. This deficiency is a major handicap in the analysis of art organizations. It also exacerbates the heterogeneous nature of the museum industry. That is, the use of cross-sectional data introduces variances in the quantities being measured due to the substantial mix of factors such as museum type, size, operating characteristics, goals, and ownership. To properly measure the impact of a particular phenomenon, all of these influences must be accounted for. Another deficiency for these data is the absence of information and critical variables such as publications and educational programs.

Even though time and resources did not permit the fine-tuning of the models, nor their use in generating long-run forecasts, several empirical results were obtained. The regression results clearly indicated that models designed for individual non-profit art forms generated results superior to those obtained for models of combined non-profit art forms. This indicates that there are sufficient differences in the modes of operation among the non-profit art organizations to warrant individual treatment (estimation). As examples of these differences, the role of endowments for Opera and Symphony was different from that for Non-Profit Theater and Ballet; Symphony and Opera were further differentiated by the impact of the Ford Foundation Symphony Program; variations in the methods of establishing prices were observed; the roles of private and governmental contributions were different among the art forms; attendance determinants varied; advertising and promotional activities differed, and so forth.

Among the several art forms, the results obtained for Symphony were superior. Close examination reveals, however, that this superiority was not necessarily due to any intrinsic characteristics of symphonies, but rather was a function of the superior data base available. Symphonies had, by far, the largest number of organizations represented in the Ford Foundation data base, i.e., 76 symphonies and orchestras. Further, symphonies are one of the oldest and best established art forms, and have generated the most extensive and consistent data over the years.

Significant improvements in all future model estimation efforts can be made only if the data of other art forms establish a level of consistency already reached by symphonies. It is encouraging to note that some efforts are presently underway in this direction, as exemplified by the current efforts to standardize the accounting conventions of museums.

While the project did not yield fully estimated simulation models, selected individual results were obtained which provide insight into the behavior of arts and cultural institutions. These results are not new discoveries, but are presented as confirmation of the ability of the separate models to reflect the real world, thereby partially validating both the individual models and the overall approach of developing forecasts by way of econometric modeling.

The term "grants and contributions" includes federal, state, county, and municipal grants; foundation grants; and private contributions. Federal grants were found to be positively associated with the number of performances and total attendance. When combined with the frequently observed negative association between these grants and measures of the overall level of economic activity in the country, this implies that the federal government tends to help those organizations in financial difficulty, and that the size of these grants is generally commensurate with the level of activity undertaken in the art form.

State, county, and municipal grants are influenced by a variety of factors. The estimated coefficients indicated that federal grants act as an incentive for increasing state, county, and municipal grants for Opera, but are viewed as a substitute in other art forms; the grants vary positively with the economic conditions of the government jurisdictions, except for Non-Profit Theater; and large operations are successful in lobbying for public support only in the cases of Symphony and Non-Profit Theater.

Except in the case of Symphony, an increase in foundation grants follows an increase in the accumulated operating deficit. This supports the statement by Baumol and Bowen that "foundations have played a crucial role for a number of particular performing organizations. Indeed, without foundation support some groups would not have survived."[3] The case of the Symphony should also be viewed in light of the very large Ford Foundation Symphony Program, which undoubtedly confounded the observed relationships between symphonies and foundation grants during the period studied.

The effect of the number of performances on foundation contributions is positive in all art forms, except Ballet. These positive relationships are likely to be the result of fund matching policies by foundations. Thus, the more successful an organization is,

as indicated by its level of operation, the more likely it is to participate in programs which require matching funds from other sources. In addition, the interest of foundations in initiating new programs can best be accomplished by funding a successful organization. The negative relationship in the case of Ballet might be indicative of foundation support to help financially troubled organizations of this particular art form.

The results with the capacity expansion factor, the desire of the art form to increase its seating capacity, are very mixed. It is likely that foundation support is not typically provided for capital expansion projects, but rather to aid financially troubled organizations or to encourage special programs.

Private contributions were found to respond positively to increases in the tax rate, as well as, but to a lesser extent, to increases in the wealth positions of the potential contributors. Both attendance and fund raising activities produce mixed and insignificant impacts on private contributions, so that further work is required before a final determination can be made for these effects.

Two types of attendance measures were attempted for most of the art forms: number of attendants, and the utilization rate of the seating capacity. In almost all cases, the specifications using total attendance performed better than those using the utilization rate. These specifications had higher predictive powers, contained more significant coefficients, and included more coefficients of the expected signs. In particular, the coefficients on price were consistently negative, while the coefficients on consumer income were consistently positive. This is in accordance with economic theory, which says that, as population increases, the purchase of goods and services, including the attendance at art and cultural organizations, increases; and, as the price of a good (ticket price) increases, the amount of the good demanded (attendance) decreases.

For most art forms, the crime rate in the area had a negative effect on attendance, as expected. At the same time, however, a variety of impacts of the unemployment rate on attendance was observed. For For-Profit Theater, the impact of unemployment on attendance was positive, indicating that unemployment provides additional leisure time, at lower cost, which creates some additional demand for leisure activities, and generally restricts such leisure demand to the local area. On the other hand, the coefficient on unemployment for Non-Profit Theater attendance was negative. Since the effect of income was already accounted for by a separate income variable, a negative coefficient is not easy to explain, unless unemployment makes the population more sensitive to declines in income when contemplating Non-Profit Theater attendance. Further work is required.

The analysis suggests quite clearly that the pricing mechanism for the non-profit art organization is that of cost-plus-markup. The net cost of production is always a major determinant of the price of admission. At the same time, the size of the accumulated deficit-surplus fund also usually influences the level of prices. That is, as the deficit grows, the pressure to increase prices also grows. Finally, the rigidity of the price structure, and the reluctance to raise prices because it may restrict the audience base, is indicated by a negative coefficient on last period's price level. Thus, in the absence of any other changes or influences, the desired price has a tendency to decline from one period to the next. This is a reflection of the goal of maximizing attendance and maintaining a broad base of interest.

The level of subscription sales was generally found to be positively related to the single-ticket price of admission. This was expected because of the discount generally provided to subscription holders. Thus, as a result of a general rise in the prices of admission among the various art forms (i.e., in all art forms except Opera), a general shift to subscription sales has been taking place over time. This relationship would not be expected to hold over the complete range of prices, however, since at some point the negative effect of the price increase on total sales will dominate the positive effect of the discount on subscription sales. The size of the positive effect that has been estimated, however, is understated because the percentage discount has been declining throughout the period of investigation.

Worker productivity was investigated by examining the behavior of a wage index in several cost functions (i.e., all but Museums). In every case, the coefficient on the wage index was positive, indicating that the cost function shifts upward as the wage index increases. If this wage index represents the change in money wages of the employees of the individual art organizations, then the upward shifting of the cost functions confirms the hypothesis that worker productivity is not keeping pace with money wage increases (i.e., the real wages[4] of workers are increasing over time, hence the upward shift in the cost function). This means, of course, that the real costs of production are increasing, which will ultimately lead to shifts toward labor-saving production techniques, e.g., shifting toward non-musical drama and away from musicals, increasing the incidence of one-man shows.

Recommendations

This project accomplished each of its four main goals. In the process of accomplishing the project goals, however, several conclusions can be drawn relative to the direction that future efforts should take.

Clearly, preliminary efforts at model estimation were fruitful in terms of accurately describing a large part of the behavior of the various organizational types. It is expected that increases in both the number of observations and the number of variables included in available data sets will, with a high probability of success, produce econometric models which are suitable for simulation and forecasting.

The acquisition of data for each of the art forms is possible, although with varying levels of required effort. The most fruitful approach would be to complete the editing (in the tradition of the Ford Foundation) of the extensive data set already acquired by the American Symphony Orchestra League. This is an outstanding data base, but it requires substantial editing to make the observations compatible.

The second most fruitful approach is to extend the Ford Foundation study on all or a subset of the organizations included. A few more years of these data, properly edited by the Ford Foundation, would greatly enhance the model estimation effort. Of course, the linking of other data sets with the Ford Foundation data base should also be explored, but the effort to link the Theater Communications group data was not very successful. Many variables were excluded and many others appear to be incompatible. Whether extensive editing would be sufficient to permit such linking is unknown.

Considerable work should be done to generate additional For-Profit Theater data, and must be done to generate sufficient data for Museums. With a minimum of effort, one could substantially improve the For-Profit Theater data by extending the effort of Dr. Moore, investigating the availability of seating

capacity data, acquiring wage structure data for Broadway artists, and exploring such data deficiencies as attendance, secondary sources of income, and production by company. An adequate Museum time series data base can be developed which is certain to be more cost-effective than duplicating the cross-sectional approach of Museums U.S.A. These data may be useful to other researchers for other programs, but they are of limited usefulness in generating forecasting models.

Lastly, implicit in the above recommendations is the abandonment of the Box-Jenkins trend modeling approach. Even though the above data recommendations apply as well to this approach as to behavioral modeling, and even though Box-Jenkins trend modeling will produce forecasts superior to those of other trending techniques, the complexity of implementation and the expert judgment required therein obviate the primary purpose for its use. It will not prove to be an effective "short-cut" method for generating short-term forecasts compared to simulation models.

With these points in mind, Applied Management Sciences is enthusiastic about the potential for success in developing fully estimated econometric models once the appropriate data have been acquired. Certainly, there has been nothing so far in the analytical effort to indicate that such a project would not be successful. To the contrary, the empirical results have repeatedly confirmed expectations based both on economic theory and on the conversations with the expert consultants. The models as conceptualized are essentially correct, and only await the necessary data to realize their full potential.

Footnotes

1 This work was performed under contract to the National Endowment for the Arts (Contract No. NEA C 169). Special thanks are extended to Mr. Harold Horowitz and Mr. David Waterman of the Division of Research, National Endowment for the Arts, for their assistance and direction throughout the project. Of course, the contents remain solely the responsibility of the authors.

2 Thomas Gale Moore, The Economics of the American Theatre (Durham, N.C.: Duke University Press, 1968).

3 William J. Baumol and William G. Bowen, Performing Arts: The Economic Dilemma (New York: The Twentieth Century Fund, 1966), pp. 340-342.

4 Actually the product wage - the money wage divided by the product price - rather than the money wage divided by the consumer price index.

Collection of Useful Economic Data in the Arts: Some issues of financial reporting

Joseph Kraemer and Jeffry Baldwin

Introduction

In May, 1976 the National Endowment for the Arts (the Endowment) engaged certain contractors to undertake the following research activities:

A. Feasibility Study for an Economic Data Program on the Condition of Arts and Cultural Institutions; and
B. Model Study for an Economic Data Program on the Condition of Arts and Cultural Institutions.

Because many of the issues and problems were associated with financial reporting, Touche Ross & Co. was engaged by the Research Division of the Endowment to provide technical analyses to these other contractors. Our role as an accounting firm has been to perform, among other things, the following tasks:

1. To review the financial data available in the files of the Endowment and of certain major service organizations in order to draw some conclusions as to the reliability and accessibility of already existing data;
2. To compare the data bases of selected organizations in a systematic manner in order to evaluate their comparability and their suitability as a basis for model-building; and
3. To summarize the experience of those organizations which have collected data from arts organizations so that the Endowment might benefit from that experience.

Summary of Major Issues

As a result of our activities, we have identified certain problems in the area of financial reporting which constitute obstacles to the orderly collection of useful economic data from arts organizations.

Currently, no system exists for regularly surveying organizations across all art forms. Rather, within each art form, there may (or may not) be a service organization which collects economic data on a consistent year-to-year basis from a sample of its constituents. To the extent such data is collected, it will have only marginal utility for inter-art form comparisons. It also may not be consistent with data collected from identical arts organizations by a different surveying institution at approximately the same period in time.

The issues summarized below are representative of the kinds of basic financial reporting issues which affected the various data sources that were examined. These findings highlight the typical problems which must be anticipated and planned for as part of the design and implementation of any new data collection process in the arts.

Data Reliability

Reliability was estimated by comparing the information across organizational data bases. Because the data collection process in the arts is decentralized, certain respondents have been asked to supply similar information to different organizations at the same time.

The Ford Foundation (Ford) and the Theater Communications Group (TCG) collected financial data from a number of in-common theaters. A single data element, "Total Operating Expenditures," was selected as the basis for a theater-by-theater comparison. The year chosen for analysis was FY74, since both organizations collected data for that year. Inasmuch as comparable data was collected from common respondents, the information should have been consistent.

Table 1 shows the comparison. Only seven (30%) of twenty-three in-common theaters reported identical "Total Operating Expenditures" to both TCG and the Ford Foundation. Variances ranged from a low of $240 (Theater 8) to a high of $355,703 (Theater 17). Twelve of the sixteen respondents reporting different expenditures had variances greater than $10,000. Four of the sixteen had variances greater than $100,000.

Without additional information, the exact causes of the variances in the reported data could not be determined on a per theater basis.[1] However, the range of probable causes would include the following:

1. Definition of Terms. There is no generally accepted set of financial reporting terminology for arts organizations. Often the definition of the surveying institution does not coincide with that of the respondent.

For example, both TCG and Ford requested "Total Operating Expenditures," and devised survey forms utilizing several line items of expenditures. Ford

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Jeffry Baldwin is a Partner, and Joseph Kraemer is a Consultant, Management Services, Touche Ross & Co., Washington, D. C.

built the total figure from the sum of "Total Salaries/Fees/Fringe Benefits" and "Total Nonsalary Costs." TCG built to the total by summing "Total Administrative Expenses," "Total Artistic Expenses," "Total Production/Technical Expenses," and "Total Other Expenses." In theory the two approaches should sum to the same total. Table 1 shows that this occurred only about 30% of the time in FY74.

2. Inclusion of Parent Organization Data. To the extent a respondent's books are consolidated with a parent organization, reported operating expenditures may sometimes include expenses of the parent. For example, Theater 23 is associated with a major university. It is probable that some of the variance shown in Table 1 results from inclusion in the response to TCG of some expenditures associated with university operations rather than purely theater activities, e.g., salaries may not have been allocated between faculty duties versus theater duties.

3. Inclusion of Imputed Cash Values for Contributed Goods and Services. Arts organizations often receive contributions in the form of goods or services. Should a respondent include in a survey response an imputed value for such contributions, the response will vary from the organization's audited statement which usually does not include such imputed values.

The area of contributions becomes even more complicated when a parent organization, e.g., a university, provides such things as utilities, security, and maintenance at no charge to the arts organization. (This may account for the large variance associated with Theater 17 which receives a great deal of in-kind services from a university.) The provision of in-kind contributed services would show as both income and expenditures in a given year and, therefore, net to zero. However, the non-inclusion of such services underestimates the actual level of public support and can result in misleading comparisons between organizations with institutional parents and those without.

4. Human Error. Another explanation of variance is human error. Such errors can occur in transcription or tabulation by the respondent or be introduced by the surveying institution as part of the coding and editing process. Table 1 shows two cases of probable human error: Theater 8's $240 variance and Theater 22's $900 variance.

The data shown in Table 1 lead to two conclusions:

1. For a significant budget item in a single fiscal year, some inconsistent responses were reported to surveying organizations by in-common respondents; and
2. No single factor appears to account for the inconsistent responses.

Whether the variance is significant is a function of the use to which the data will be put. Inconsistent responses regarding the level of operating expenditures could be highly significant to those auditing the financial records of a given respondent. However, the data collected by TCG and Ford were used to determine problems and trends within a broad effort to monitor the economic state of the arts. Consequently, inconsistent responses on the order of those shown on Table 1 may not be significant in the aggregate. The sum of the operating expenditures for FY74 reported to the Ford Foundation by theaters also reporting to TCG was approximately $500,000 (2%) greater than the sum of the responses to TCG. A 2 % variance would appear to be acceptable for purposes of analyzing the state of an industry, for presenting trends over time, and for model building purposes.

One data use does require some caution because of these variances. To the extent that time series data is presented when more than one organization collected the data, the material presented should be noted accordingly. For example, TCG data for FY75 and FY76 will be used to up-date the Ford Foundation data. There will be a certain amount of variance between FY74 and FY75 because these organizations used different surveys and procedures to collect the data.

Additional Factors Affecting Reliability

Interviews with representatives of organizations that have undertaken data collection activities in the arts revealed some additional factors which have affected data reliability in the past.

1. Financial Capability and Incentive of the Respondents. There is a wide range of financial capability (or lack thereof) among arts organizations. In some cases, this is complicated by an attitude approaching disdain for the commercial aspects of non-profit arts activities. Consequently, a lack of accurate financial records may not even be considered a problem.

Some grantor organizations (such as Ford) have begun to request periodic financial reports from grantees. This process tends to result in grantees maintaining similar financial records. Consequently, this may become less of an issue in the future.

2. Fiscal Year-End Variances. The records indicate that a majority of arts organizations have a 30 June fiscal year-end. The next most common fiscal year-end is 31 December. Other fiscal year-end dates include 30 September, 31 August, and 30 March. The inconsistency of year-end dates complicates the conduct of a survey. For example, a survey conducted in September-October 1977 will not collect FY77 year-end data for those organizations which are on a calendar year for accounting purposes. Most likely such organizations will submit FY76 data and, thereby, cause a problem for the surveying organization, which is interested in collecting and analyzing FY77 data. Mixing FY76 data for some respondents with FY77 data for others can result in misleading conclusions. Unfortunately, such mixing often occurs and is justified in terms of the need to publish a report as soon as possible.

Data Accessibility, Storage, and Retrieval

There is no centralized access available to financial data on arts organizations. When information is required, as occurred on this project, it must be drawn together from diverse sources, both within and without the Endowment. This process is time consuming and expensive. The effort required to gather the data tends to impede the data analysis by diverting resources from the analysis to the more mundane tasks of data collection and data organization.

With the exception of Ford, none of the service organizations or Endowment Program Offices has automated the data retention or retrieval process. Consequently, information is stored on paper records and summarized manually on spread sheets. The analysis performed is usually basic cross-tabulation without any use of interpretive statistical techniques.

The Future

The studies sponsored by the Endowment's Research Division, of which our work was only one part, have demonstrated that the lack of a centralized data collection effort hinders, if not renders impossible, any systematic analysis of the financial and other characteristics of arts organizations. Consequently, when there is a request for information, for example,

from Congress, there does not exist any system of generating a response which is both timely and accuarate.

Touche Ross was concerned with the accessibility, reliability, and comparability of financial data collected from arts organizations. What we found was that data collected to date were not particularly accessible, had reliability problems, and were not generally comparable--even in situations where different institutions conducted surveys of the same respondents in the same year.

The arts face a choice: either to continue the existing decentralized data collection process, or to cooperate in the design and implementation of a new process. Such a process would facilitate consistent reporting practices and create a data base on the arts. This data base would contain current and accurate information and would be accessible to a variety of potential users. With careful planning, such a data collection process need not impose any significant incremental burden on arts organizations nor should it divert resources from the primary creative tasks of the arts.

We discussed previously the underlying causes of non-comparable and unreliable data in current data collection efforts. The new process must address and correct these problems.

1. Uniform and accepted terminology should be defined, with the participation of arts organizations to enhance acceptance and use;
2. Standard reporting practices should be specified for such items as allocation/consolidation of parent organization data and in-kind services;
3. The process should include review points to allow identification of errors;
4. In order to insure timely and accurate responses, the process should contain some incentive: for example, it should be made an integral part of the Endowment's grants process;
5. Finally, the data collected should be entered into a computerized system and outputs made available to the various users, including service organizations and state and metropolitan arts councils.

The non-profit arts cannot sustain themselves on earned income alone. The grantors who provide the required unearned income have a right to know the economic health of the institutions they support, while the arts have to establish their funding needs in the context of competition for scarce public resources. There is no choice other than to bring coherence and consistency to the process of arts data collection, a process which currently is discontinuous in time, fragmented in responsibility, and inconsistent across art forms.

Footnotes

1 By letter dated August 11, 1977, TCG did advise the Endowment's Research Division of possible explanations for specific variances based on TCG's knowledge of a theater's financial situation in FY74. TCG's comments provided some helpful insights for our analysis.

Table

REPORTED OPERATING EXPENDITURES FOR FY74

Theater	Ford Foundation	Theater Communications Group	Variance
Theater 1	$ 375,540	$ 375,540**	$ -0-
Theater 2	2,383,119	2,134,367	248,752
Theater 3	1,602,545	1,589,793**	12,752
Theater 4	1,604,517	1,604,517	-0-
Theater 5	640,585	592,207	48,378
Theater 6	254,361	267,011	(12,650)
Theater 7	583,612	594,969	(11,357)
Theater 8	2,082,292	2,082,052	240
Theater 9	591,669	591,669	-0-
Theater 10	782,116	879,342	(97,226)
Theater 11	2,280,406	2,131,464	148,942
Theater 12	735,714	738,581	(2,867)
Theater 13	1,974,075	1,974,075**	-0-
Theater 14	582,091	582,091	-0-
Theater 15	877,789	905,563	(27,774)
Theater 16	513,850	517,380	(3,530)
Theater 17	887,169	531,466	355,703
Theater 18	752,727	752,727	-0-
Theater 19	841,580	841,580	-0-
Theater 20	866,979	847,732	19,247
Theater 21	1,026,993	935,962	91,031
Theater 22	233,510	232,610	900
Theater 23	480,513	724,574	(244,061)
	$22,953,752	$22,427,272	$526,480

**Adjusted to reflect FY 74 year end data reported to TCG as part of their FY 75 annual survey. The adjustment was required because certain respondents were on a calendar year basis for accounting purposes; therefore, FY 74 year end data could not be supplied to TCG in time for inclusion in the FY 74 survey results.

Workshop:
Evaluating data series recommendations for forecasting the economic condition of the arts

Moderated by Steve Benedict, consultant to the National Endowment for the Arts, this workshop reviewed a report by Booz Allen and Hamilton on alternative approaches toward developing an Endowment-sponsored arts data series. While the reports reviewed during the morning session focused on the data needed for forecasting and modeling, as well as the quality and accessibility of current data sets, the Booz Allen study compared the costs of alternative data collection plans and recommended a plan for putting the preferred method into operation.

The National Endowment's Research Division has proposed a three-part system of data collection emphasizing annual, five-year, and semi-annual surveys. The annual data series would cover theatre companies, opera companies, dance companies, symphony orchestras, and museums; would seek to report economic conditions and levels of activity and service by arts institutions; and would provide a basis for preparing forecasts for use in five-year plan development. The five-year survey would not necessarily be done by the Arts Endowment, but might use the Census of Business that is regularly done on a five-year basis now. The semi-annual "quick response" survey will utilize a small sample to identify developing trends and problems.

The Booz Allen report focused primarily on the annual data series, evaluating five data collection plans, four of which utilized questionnaires distributed and collected by mail. The fifth method used the grant application mechanism as the means for distributing and collecting the questionnaires. Booz Allen recommended use of the application mechanism, inasmuch as this approach would produce the highest response rate and the most complete coverage at the least annual operating cost, estimated to be $160,000 to $220,000 annually. In addition, it was felt that the application mechanism imposed less of a burden on participating arts institutions than would a separate survey, and would represent an expansion of in-place Endowment procedures rather than an entirely new initiative.

A number of issues were raised during workshop discussion. There was extensive discussion of the consequences of the application mechanism for data accuracy and universe coverage. It was suggested that the use of the supplement constituted an incentive to respond since it formed a part of the grant application, and would help overcome the usual hesitancy to respond to mailed questionnaires. A number of categories of artistic activities and organizations are represented completely in the application process, while some might never appear. Therefore, the application mechanism might have to be supplemented by mailed surveys to be totally complete. Arts service organizations are also collecting data, and there was discussion of the need for coordination to avoid imposing an additional reporting burden.

Advocates of both a role for the Endowment and the recommended approach pointed out that service organizations have their own purposes for data collection and currently generate non-comparable data sets covering a limited universe, usually their memberships. As an agency of government, the Endowment has a responsibility to collect data needed to satisfy the information and planning data requests from Congress and the Office of Management and Budget, as well as the needs of the more general arts community it serves.

Other questions raised concerned likely data quality, given institution accounting and record-keeping procedures, and the accuracy of the estimated cost of data collection.

Issues in Developing a Model to Assess the Community-wide Economic Effects of Cultural Institutions

David Cwi and Katharine C. Lyall

Introduction

In recent years there has been a growing interest on the part of the arts community to document the full range of effects of the arts and arts institutions on American life. In particular, while the primary purpose of artistic and cultural institutions is not to create jobs, generate business for local entrepreneurs, or boost sales of durable goods, many in the arts community have felt it important to engage in studies aimed at estimating the economic effects of selected arts institutions on their local communities.

Intentionally or not, arts institutions do generate a number of economic effects. Under a grant from the Research Division of the National Endowment for the Arts, we tackled the job of developing a model which could be used by the general arts community--individuals likely not to have had advanced training in economics and the social sciences--to estimate a variety of positive and negative economic effects of arts institutions on their local communities. More generally, the model we adapted

* utilizes data generally available from an institution's internal records or from local, state, or federal documents;
* can be adapted to a variety of settings and take account of local governmental, social, institutional, and economic conditions;
* focuses not only on the institution but on its employees and audiences as well;
* can be used to assess the effects of one institution or many;
* uses as inputs a variety of policy-relevant data respecting an institution and its community; and
* identifies negative as well as positive effects on the local economic base.

What follows is a brief introduction to the model, and a report on the results of its application to a group of eight institutions in metropolitan Baltimore.

The model we evolved was adapted from one used originally to estimate the economic effects of colleges and universities.[1] The model consists of 30 linear equations developed to measure effects on local business volume, government income and expenditures, and personal income and jobs (Tables 1 and 2). A number of these equations are subequations of others and are added up to calculate a larger impact. The tripartite division into business, individual, and government sector impacts allows us to recognize effects that may benefit one sector at the expense of another and also to identify effects that may unfold over different periods of time. To the best of our knowledge, this is the first arts impact study to explicitly recognize such differential effects. This means however that in looking at the table of results below, the effects cited cannot simply be added up for a total impact figure.

The data required to use the model are taken from the internal accounts of the examined institutions as well as from local, state, and federal documents. In addition, surveys of institutional audiences, employees, and guest artists are used. To test the model, we applied it to eight major arts institutions in Baltimore. These institutions include the traditional core of Baltimore's resources in the visual and performing arts, but hardly exhaust the full range of arts resources available to residents of the Baltimore metropolitan area. Correspondingly, these institutions, while important, do not exhaust the effect of the arts on the local economy. For example, total full time employment at the examined institutions numbers only 404 or seven percent of the 5805 writers, artists, and entertainers reported by the 1970 census to be working in metropolitan Baltimore. As has been typical of studies nationally, our model focuses only on the economic effects of arts institutions.

The local institutions we examined include The Baltimore Museum of Art, The Baltimore Symphony and Baltimore Opera, The Arena Players, The Maryland Ballet, Center Stage, The Morris Mechanic Theatre, and the Walters Art Gallery. We are pleased to acknowledge again the assistance and cooperation received from their management and staff.

The economic effects of these eight institutions may be small relative to other industries in metropolitan Baltimore, but our findings indicate that significant reductions in their budgets would have perceptible local effects (Table 3).

Business Sector Impacts

In Fiscal 1976, the eight institutions spent

David Cwi and Katharine Lyall, Senior Research Associates, The Johns Hopkins University, Metro Center, Baltimore, Md. Dr. Lyall is presently Deputy Assistant Secretary for Economic Affairs, HUD, Washington, D. C.

$5.3 million for goods and services, of which 47 percent represents purchases from suppliers and individuals in the Baltimore region. Another $4 million was spent for wages and salaries.

Eighty percent or more of the institutions' professional and administrative staff members live in Baltimore City, with the remainder concentrated primarily in Baltimore County. Slightly less than half (47 percent) of all employees are homeowners in the metropolitan area. Employees reported that, of $6.7 million of disposable family income (net income after deducation of taxes and social security contributions), two-thirds ($4.4 million) was spent in the metropolitan region.

Total local paid attendance at all eight institutions during the 1976 season was approximately 718,000, with about six percent of patrons coming from outside the metropolitan region. The percentage of out-of-region audience determined from our audience survey varied substantially among the eight institutions, ranging from two percent for the Walters Art Gallery and Center Stage Theatre to 14 percent for the Baltimore Museum of Art.

In addition to the ticket price, local audience parties spent, on the average, sums ranging from $3.85 to $15.65 per visit (meals, transportation, parking, babysitters, etc.), depending on the institution and the type of performance. As might be expected, attendance at the museums entailed the smallest ancillary expenditures, while attendance at the Symphony and the Mechanic Theatre involved the highest average supplementary expenditures. Altogether, local audiences in fiscal year 1976 spent an estimated $2,634,601 in addition to ticket and admission fees. These figures were obtained from audience surveys taken over a variety of performances and times of day. Because many persons attend performances and cultural activities in couples and groups, we formulated our survey questionnaire to elicit average expenditure by party size.[2]

In fiscal 1976, some 43,000 visitors from outside the Baltimore region came specifically to use the eight arts institutions. These visitors contributed roughly half as much as resident audiences to local area spending, despite the fact that they comprised, at any one institution, only two percent to 14 percent of total attendance. Out-of-region patrons exert a disproportionate economic influence compared to local audiences, both because they spend more per visit, and because a larger share of these visitors spend money at all.

Average per diem expenditures reported by out-of-region visitors ranged by institution from $11.80 to $48.60, yielding a total expenditure of $1,891,393 attributable to the drawing power of these institutions in attracting out-of-town-visitors. It is important to note that this calculation reflects expenditures only for those respondents who indicated that they came to Baltimore specifically to visit the arts institution under study.

Each year, arts institutions contract with designers, directors, conductors, choreographers, featured soloists, and others. These non-resident "guest artists" make a modest contribution to local spending. The eight examined institutions reported a total of 1,913 guest-artist days spent in the Baltimore region, at per diem rates ranging from $30 to $40, for a total estimated fiscal 1976 local expenditure of $68,247. Our computation of guest artist spending is undoubtedly conservative, since no attempt has been made to include members of family or entourages in the total estimate.

Notice, however, that these direct expenditures by the institutions and their staff, audiences, guest artists, and out-of-region visitors do not capture the full effect of such activities on the economic base of the region. These direct expenditures generate second order effects, as local businesses make purchases of their own to support the institutions' local demand for goods and services. Eventually, Baltimore metropolitan region businesses will purchase $9.1 million worth of additional or backup goods and services from other local businesses, while the employees of all local firms eventually affected by institution-related business generate another $9.4 million in local business volume. In addition, these local firms have invested $5.7 million worth of inventory, equipment, and real estate in order to service institution-related business.[3]

A portion of the business and personal incomes generated by institutional activities are also deposited with local banks, and this results in an expansion of the local credit base by some $3,106,000.

At this point, we should note that some aspects of arts institution activity may have negative effects on the local economy. To the extent that the institutions operate enterprises or provide services in competititon with local businesses, their receipts from these activities should be recognized as a substitution for other private business earnings in the community. In some instances, however, it may be reasonable to think that the subsidiary activities of arts organizations are net additions to total business volume in the region, perhaps competing with activities outside the area but not reducing sales within the region. Upon examination of the particular auxiliary enterprises operated by the eight institutions in our Baltimore sample, we decided not to count any of the $280,820 in income from subsidiary enterprise as a net loss to other private sector vendors. The bulk of this income was derived from gallery and gift shop sales and from concessioned restaurant facilities: profits from concessioned restaurant sales go to private business anyway. In the case of gallery sales, we assumed that sales represent items that are largely unobtainable elsewhere, and that, in any case, museums stimulate other private sector purchases through a heightened interest in the purchase of art. No data are available on which to make an evaluation or assumption regarding the transfers from other recreational, entertainment, or educational areas that may be represented by the ticket and related expenditures associated with attendance at arts events.

Government Sector Impacts

A related finding concerns the impact of tax-exempt arts institutions on the fiscal status of local governments. The eight institutions in our sample both impose costs on the city and bring revenues to the city. Costs are assessed in terms of foregone property taxes; unreimbursed municipal services; and the operating costs of public schools attributable to the institutions, their personnel, and their children. The unreimbursed value of local government services to the institutions and their employees is estimated at $678,612. These items clearly do not exhaust all effects on local government, but reflect only selected impacts directly traceable to the institutions and their employees. On the revenue side, although all eight institutions operate under tax-exempt status, they are nonetheless responsible for $132,157 in tax payments to the six local governments in the SMSA.[4] The sources of these revenues were property taxes, locally retained sales taxes,[5] local income taxes, and population-based state aid to localities.

The institutions also provided municipal-type

services for themselves, including security services and trash collection, with an annual value of about $33,172. Finally, we have estimated that the value of foregone taxes on tax-exempt property owned or occupied by the eight Baltimore arts institutions is no more than $100,000 and is more likely $60,000. These figures reflect only foregone tax revenues on property used by the arts institutions themselves and do not attempt to reflect any positive or negative spillover effects that these institutions may have on the value of surrounding (taxable) properties and neighborhood cohesion. It is important to note also that all local governments in the metropolitan area contribute more than $1.5 million to the eight institutions in outright transfers.

Individual Impacts

Impacts on private individuals in the metropolitan region are largely through jobs and employment opportunities. We estimate that 1,175 full time jobs in the Baltimore area are produced by the activities of the eight arts organizations in our sample and that these generate more than $9.6 million in personal income for the region.

Broader Use of the Arts in Attraction of Firms

In recent years, advocates of the arts have stressed the importance of spinoff economic effects that are not easily quantified. In particular, it has been claimed that the availability of artistic and cultural activities can be a decisive factor in both industrial relocation decisions and in the recruitment and retention of executives.

Without arguing that public policy toward the arts ought to aim primarily at maximizing economic returns to the community, it should be noted that, if arts and cultural activities have an ancillary role in economic development decisions, this would represent an important additional consideration in the development and evaluation of public policy toward the arts. Therefore, as part of the Baltimore Case Study, we sought to evaluate local and national experience with respect to the impact of artistic and cultural amenities on industrial development and executive recruitment.

Since there are no hard data on the impact of artistic and cultural amenities on industrial development and executive recruitment in the Baltimore region or in the nation, we sought the judgments of a variety of knowledgeable individuals through unstructured interviews.

We refer you to our full report for a discussion of these interviews. Suffice it to say that there was universal agreement among respondents that artistic and cultural amenities by themselves are not a determining factor in either industrial or executive decisions. When locating a business, business climate issues are of prime importance. With respect to "quality of life" issues, it is important for arts advocates not to equate "quality of life" with "quality of artistic and cultural resources." Artistic and cultural amenities are a part of the total community fabric that also includes such factors as recreational opportunities, schools, neighborhoods, the cost of living, climate, efficiency and performance of local government, the environment both man-made and natural, the quality of health and educational facilities, and positive social conditions. Cultural and recreational opportunities are generally viewed as one area of concern, and business and individuals are interested in the total mix of available educational and recreational opportunities within this broader "quality of life" context.

Some Conclusions

In reviewing the effects of the eight Baltimore institutions, we are persuaded by our work that institutional type, e.g., theatre or museum, is less useful for identifying economic impact than structural distinctions, including (1) the proportion of non-salary expenditures made to local suppliers; (2) the number and composition of employees (guest artists, resident troupe, permanent employees); (3) the proportion of employee expenditures remaining in the community; and (4) local and visiting audience expenditures attributable to institutions. The interaction of these factors is idiosyncratic; for example, in the Baltimore instance, should an arts employee reside in Washington, D. C., his earnings and resultant secondary spending would primarily benefit Washington, not Baltimore. In this case, a visiting artist resident in Baltimore for part of a season might have a greater local spending impact than the direct staff employee. Similarly, in the assessment of audience expenditures attributable to the arts, it is not sufficient to know total attendance, since spending varies substantially by residence of patrons (local versus out-of-region), and spending by audience varies significantly by type of institution. Further, an institution that relies heavily on contracts to guest artists who spend only short periods in the community may export a significant proportion of its wage bill. An analogous situation will arise for institutions dealing with outside suppliers.

If interpreted correctly, we believe that the model can provide some useful insights to local planners and arts organizations on their contribution to the local economy. However, some caveats are in order.

As noted earlier, it cannot be inferred that the eight institutions examined in this study exhaust the effect of the arts on the Baltimore economy. While the eight institutions studied include the region's largest arts institution, these organizations constitute no more than 10 percent of the total arts employment in the Baltimore metropolitan area.

Finally, while the model can illuminate the important and complex economic relationship of arts institutions to the business, government, and individual sectors, and so would be helpful in evaluating the value of artistic and cultural activities as an economic development strategy, we caution community planners and arts advocates against placing inappropriate emphasis on narrowly defined "return on investment" criteria in the development of public policy toward the arts. As noted at the start, the primary purpose of arts institutions is not economic but the enrichment of our lives in non-economic ways. Since individual arts institutions have differential economic effects, narrowly defined "return on investment" criteria might suggest differential public support or constraints on that support so as to maximize local economic effects. Our report to the Arts Endowment includes a number of examples of potentially inappropriate policy uses of economic impact analyses, and we invite you to refer to the full report for this discussion.

Footnotes

1 This model has been adapted from J. Caffrey and H. Isaacs, Estimating the Impact of a College or University on the Local Economy (Washington, D. C.: American Council on Education, 1971).

2 A variety of issues inherent in the use of self-administered questionnaires to acquire audience expenditure data are discussed in our report to the Arts Endowment.

3 This represents the fiscal 1976 value of these assets and not expenditures made in 1976, although a portion of these assets may have been acquired in that year. Such expenditures were not necessarily made with local firms.

4 Includes only tax payments related to direct, not secondary, expenditures (i.e., Model B-1). This figure also excludes a variety of user fees paid by employees.

5 Only sales tax revenues going to local government are counted.

Table 1

A MODEL TO ESTIMATE THE ECONOMIC IMPACT OF THE ARTS

Business Sector Impacts

B-1 $E = E_i + E_e + E_g + E_a + E_v$

B-1.1 $E_i = z(TE_i - W - Transf - T_x)$

B-1.2 $E_e = (f)\ (W_{en} + .5\ Y_{ns})$

B-1.3 $E_g = g\ (GD)$

B-1.4 $E_a = a(TA)$

B-1.5 $E_v = v(TVD)$

B-2 $BP = (m_p - 1)(E)$

B-3 $BV = (.45)(E)(m_i - 1)$

B-4 $BI = RP + Inv$

B-4.1 $R_p = (E/TBV)(AV/ar)$

B-4.2 $Inv = ir\ (E + BP + BV)$

B-5 $CB = (1-t)[TD_l + Td_e\ (Emps)] + (1-d)[DD_l + DD_e\ (Emps) + cbv(E + BP + BV)]$

B-6 $NBV = IB$

Government Sector Impacts

G-1 $GR = RETX + ST + YT + SA + OR$

G-1.1 $RETX = RET_i + RET_e + RET_b$

G-1.1.1 $RET_e = Emps(H)(pt)(TRA/R)$

G-1.1.2 $RET_b = (RP)(ar)(pt)$

G-1.2 $ST = st(STR)(E/TBV)$

G-1.3 $YT = (TYT/HH)(Emps)$

G-1.4 $SA = PS + OR$

G-1.4.1 $PS = N(C)(SE)$

G-2 $OC = MOC + PSOC$

G-2.1 $MOC = B(HH/POP)$

G-2.2 $PSOC = (SB)(C/TC)$

G-3 $GP = (GP_m)(MGC/B) + (GP)(PSOC/SB)$

G-4 $FTX = AV(ar)(pt)$

G-5 $SSVS = P_i + S_i + L_i + T_i$

Impacts on Individuals

I-1 $J = Emps + x(E + OC)$

I-2 $PY = W + p(E + OC)$

I-3 $DG = k(PY)$

Table 2

LIST OF EQUATIONS

Economic Impacts on Local Business

Direct Impacts

B-1	Total Institution-related Local Expenditures (E)
B-1.1	Local Institutional Expenditures for Goods and Services (E_i)
B-1.2	Direct Expenditures in the Local Community by Institutional Employees (E_e)
B-1.3	Local Expenditures by Guest Artists (E_g)
B-1.4	Local Expenditures by Local Audience and Patrons (E_a)
B-1.5	Local Ancillary Expenditures by Non-Local Audience and Other Users (E_v)

Induced Impacts

B-2	Purchases by Local Businesses from Local Sources in Support of Institution-related Expenditures in the Local Economy (B_p)
B-3	Local Business Volume Stimulated by Institution-related Income Spent by Local Business Employees (BV)
B-4	Value of Local Business Property Committed to Institution-related Business (BI)
B-4.1	Value of Local Business Real Property Committed to Support Institution-related Business (RP)
B-4.2	Value of Business Inventory Committed to Support Institution-related Direct and Secondary Business Volume (Inv)
B-5	Expansion of the Local Credit Base Attributable to Institution-related Deposits (CB)
B-6	Local Business Volume Unrealized Due to Institution-related Enterprises (NBV)

Economic Impacts on Local Governments

G-1	Total Institution-related Local Tax Revenues (GR)
G-1.1	Local Real Estate Taxes Paid by the Institution, Its Employees, and Local Businesses Serving Both (RETX)
G-1.1.1	Local Real Estate Taxes Paid by Institutional Employees (RET_e)
G-1.1.2	Real Estate Taxes Paid by Local Businesses on Real Property Committed to Support Institution-related Business (RET_b)
G-1.2	Local Sales Tax Revenues Resulting From Institution-related Direct Expenditures (ST)
G-1.3	Local Income Tax Revenues Paid by Institutional Employees (YT)
G-1.4	State Per Capita Aid to Local Government Attributable to Institutional Employees (SA)
G-2	Operating Cost of Government-provided Municipal and Public School Services Attributable to the Institution and its Employees (OC)
G-2.1	Local Governmental Operating Costs (Excluding Schools)
G-2.2	Public School Operating Costs Attributable to Institutional Employees (PSOC)
G-3	Value of Local Governmental Property Committed to Support Services to Employees (GP)
G-4	Foregone Real Estate Taxes Due to the Institution's Tax-exempt Status (FTX)
G-5	Value of Local Governmental Services Self-provided by the Institution (SSVS)

Economic Impacts on Individuals

I-1	Number of Local Jobs Resulting from Institution-related Direct Effects on the Local Business Sector and Government (J)
I-2	Total Local Personal Income Due to Institution-related Direct Effects on the Local Business Sector and Government (PY)
I-3	Durable Goods Purchases Attributable to Institution-related Increases in Total Personal Income (DG)

Table 3

SUMMARY OF ECONOMIC EFFECTS--1976
8 BALTIMORE ARTS INSTITUTIONS

Business	Fiscal Year 1976
Total direct expenditures of the 8 institutions for goods and services	$ 5,344,754
Of which purchased locally	2,405,026
Employee household disposable income	6,701,479
Of which spent locally	4,422,976
Total audience spending (other than ticket price)	4,515,993
Of which local audiences spent	2,624,601
Of which out-of-region audiences spent	1,891,392
Spending by guest artists	68,247
Secondary business volume generated by suppliers and their employees	18,499,454
Current value of backup inventory, equipment, and property	5,746,743
Government	
Institutions-related tax payments to local government	678,612
Value of local government services to institutions-related employees and their households	132,157
Foregone property taxes on tax-exempt property	59,765
Total local government contributions to the 8 arts institutions	1,578,545,
Individuals	
Number of full-time jobs in Baltimore SMSA attributable to institutions-related activity	1,175
Personal incomes generated by institutions-related business volume	9,676,284

Workshop Tutorial:
How to assess the economic impact of arts institutions on their communities

This workshop/tutorial was developed to orient interested conferees to the economic impact model reported on during morning session. Copies of Research Division Report No. 6, Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore were distributed and reviewed by David Cwi and Katharine Lyall. At the time of the conference, this report was the only Research Division study available for distribution.

The economic impact model consists of 30 equations. Each is reviewed at length in the user manual that forms a part of the report. Conferees were first given an orientation to the user manual with discussion following regarding specific assumptions underlying individual equations. Data collection tasks, including requisite employee and audience surveys, were also reviewed.

There was extended discussion of the utility of economic impact studies to local communities. Representatives of arts institutions indicated that the data provided by such studies was irrelevant to an institution's artistic mission. Further, there was some feeling expressed that the task of assessing economic impact was somehow suspect, akin to finding a false fact. Other conferees noted that in the competition for public dollars, economic impact information was the sort that legislators "listened to." By having this information available, together with other data on arts impact, legislators would find it easier to justify arts appropriations. Some were uncertain whether studies of arts impact had the desired political effects.

It was agreed that studies alone would not increase arts support, and that this is often a political matter with the models for successful political action varying by community. To the extent that political processes are facilitated by the timely presentation of information, economic impact and other studies may be helpful.

Cwi and Lyall called attention to the final section of their report to the Arts Endowment which notes the potential for misuse of economic impact data in the development of public policy. Conferees were cautioned not to use economic impact data in ways that might later come back to haunt them. Future public appropriations may be discouraged if misleading claims are used today to elicit public support. Equally important, should appropriations be made largely on the basis of economic effects, this may encourage funding decisions not in the best interest of the arts community.

Studies of the Condition and Needs of Cultural Institutions: Their past uses and future prospects

Carol Grossman and Eric Larrabee

Since its inception in 1970, the National Research Center of the Arts has conducted 34 studies in the cultural field. A number of the studies have viewed non-profit arts and cultural organizations as an industry, focusing on this industry's present condition and future needs. Industry studies have been conducted twice for New York State; for the states of Washington, California, and New York; for museums nationwide; and for all arts nationwide.

These studies have been largely factual, concerned with gathering information about such matters as income and expenditure, personnel, facilities, audiences, and public service provided. They have routinely been based on direct personal interviews with the administrative directors of surveyed organizations, supplemented by self-administered forms. When factual questions have been supplemented by others of a qualitative character, these have directly solicited the respondents' opinion, especially regarding future needs and anticipated trends. Confidentiality is guaranteed, and the data summarized and reported only in the aggregate by size, art form, geographic location, etc. Responses by individual institutions are never released, though special aggregates and special runs have often been made.

Administrators of arts organizations are not likely to be predisposed in favor of survey research. They are frequently suspicious of statistics, dubious about the findings of previous studies, and unimpressed by the usefulness of the results. Arts organizations are so varied in scale and function that standardized questions often seem to the respondent to be inapplicable, or to require an answer which forces institutional reality to conform to a standardized abstraction. Such basic matters as organizational facilities and the location of decision-making authority are likely to be far more complex than a uniform questionnaire can deal with; and the quality which gives an organization its uniqueness, in its own eyes, may vanish when incorporated into a statistical aggregate, or so they fear.

Only gradually, as a result, has the need for the most rudimentary and currently-maintained information been perceived. Certainly no other substantial sector of the national economy is so unable to account for itself to a public on which it increasingly depends. What August Hecksher reported to President Kennedy in May 1963, namely, that a "major obstacle" to a sound national policy on the arts was "the lack of adequate up-to-date factual and statistical information" is just as true now as it was then. The National Research Center's past and current experience has impressed upon us the intractability of arts information in the face of this national need. Even though this experience prepared us for the time used to acquire accurate information, that time--five months at least--is alone a staggering testimony to this intractability.

More importantly, we have learned a considerable amount about the kinds of information arts organizations can be expected to provide. It is not realistic to ask for a high level of discrimination concerning attendance figures. Performing companies which tour ordinarily have no capability for counting the house when they are away from home. Lacking a functional necessity to do so, many arts organizations have traditionally kept no attendance figures, even when it was possible to do so. When attendance information is available, it rarely permits breakdowns into significant sub categories. For example, many museums, though they may know the number of school groups they handle, make no distinction in their reported total attendance between children under 16, adults, and adults over 65. Finally, with the increasing number of arts events in casual circumstances, such as street festivals, performances in parks, etc., an important sector of the growing arts audience can be calculated no more accurately than a police estimate of the size of the crowd.

Most difficult of all to secure is financial information. Here an individualistic and reticent tradition is very much alive in the arts. Even when assured repeatedly of confidentiality, many arts organizations are reluctant to reveal details of income and expenditure unless authorized to do so by their trustees. As a matter of policy, some institutions will release financial data only to potential donors or sources of funds. Moreover, the argument that financial data is a useful tool for increasing

Eric Larrabee is President, and Carol Grossman is Vice-President, National Research Center of the Arts, Inc. New York.

overall governmental arts funding has no appeal to those organizations which currently have no need for government funds, or no past success in obtaining them.

Once candor and good will are assured, the problems of precision and comparability have only begun. The bookkeeping requirements and procedures of arts organizations vary enormously. In the low budget-size categories (e.g., up to $50,000 annual expenditure), it is not uncommon for organizations to have no annual operating budget as such, much less an audited budget statement. These organizations function on a month-to-month, week-to-week, or hand-to-mouth basis, so that they can be included in a survey only by constructing their budgets for them. At the other extreme are organizations so diversified and interrelated that only with difficulty can budgets for their constituent units be established independently. A fine arts society, for example, may serve as an umbrella for a museum, an art institute, and a children's theatre.

It is a commonplace that uniform, accepted standards of financial reporting do not exist in the nonprofit cultural field. What may not be realized, however, is the extraordinary range of possibility for variations in practice, all of which are "acceptable," especially in the treatment of non-current funds. For obvious reasons, there is an implicit pressure to show deficits. A partner of one large accounting firm, who has had considerable experience with arts organizations, estimates that by adopting one or another of various fully accepted and legitimate principles of reporting, the bottom line figure can be made to vary by as much as 30 percent. The more division within an organization, the more permissible variation there may be. An organization may quite honestly reply, "We have three different sets of books. Which one do you want."

To extract the true story, therefore, becomes an exercise in ingenuity. Above all, the factual information survey instruments elicit must be carefully checked, internally within itself and externally within minimum standards of plausibility. In our experience, very few completed questionnaires survive the validation process uncorrected. In a recent survey, one organization came to us reporting a seven-digit deficit. Their audited statement suggested that they had in fact a five-digit surplus. When reviewed by us and an outside independent accountant, it seemed that they had a six-digit surplus.

To be sure, the organizations themselves are not solely responsible for the varying ways in which records are kept. They are continually being asked for data. They complain, with some justice, that no sooner is one form filled out than another arrives: from the IRS, from the National Endowment, from their state arts council, from foundations, from their respective service organizations (ASOL, AMA, TCG, OA, AADC, etc), and from research agencies like ours. All the forms are different, inasmuch as the needs which give rise to them are different. Attempts to standardize instruments have foundered on the necessity each art form feels to generate information reflecting its own realities. The lack of uniform reporting stems, in our opinion, from the fact that the organizations themselves have not rebelled.

This somewhat somber characterization of the current situation is offered, not to discourage research, but to indicate some of the consequences of the fact that research in the arts is so recent in origin. Few other comparable sectors of the economy have been, until recently, so cursorily examined. We are only beginning to emerge from the descriptive stage. The studies that we have described have provided a basic taxonomy and a system of organization and classification allowing the whole to be perceived and trends to be charted while also locating more detailed studies in a correct context. Up to this time their primary usefulness has been advocacy, to serve as a guide to policy in a field where the absence of data had hitherto been an obstacle to decision-making. It may be, as some have argued, that this stage is coming to a close. But it will be closed only when it is completed, when the basic facts are in place, to serve as benchmarks and boundary lines. Until the past decade this was unknown territory. To the extent that the National Research Center of the Arts has traversed it, we are in a position to report on the overall outlines of the landscape, the characteristic flora and fauna, and the customs of the natives. But we can also report that there is still open country to be explored and work to be done, and that in our view the descriptive task should by no means be closed to intrepid researchers.

The Economic Condition of the Live Professional Theatre in America

Robert J. Anderson, Jr. and Sonia P. Maltezou

Over a decade ago, in the first full-scale investigation of the economic condition of the live performing arts, Baumol and Bowen concluded that the financial plight of the performing arts would continue to worsen due to basic structural economic factors.[1] They found that the cost of performance tends to rise at a greater rate than the general price level, since there is relatively little scope in live performance for the kind of productivity increases that characterize the rest of the economy. They called this phenomena the "cost disease." At the same time, the rate of growth of box office revenues tends to be held down because of the commitment in some segments of the performing arts community to keeping admission prices within reach of as large a cross-section of the public as possible.

While the Baumol and Bowen diagnosis is unmistakably clear, their prognosis for the future rested heavily upon a number of unknowns. Regarding the implications of their conclusions for the future, they wrote:

> This conclusion has implications that are rather sobering. It suggests that the economic pressures which beset the arts are not temporary--they are chronic. It suggests that if things are left to themselves deficits are likely to grow. Above all, this view implies that any group which undertakes to support the arts can expect no respite. The demands upon its resources will increase, now and for the foreseeable future. Happily, however, we shall see that contributions have also been growing and that there is some reason to hope that the sources of philanthropy will be able to meet much of the expanding need for funds. Some classes of performing organization--especially the established groups and those with well-organized fund raising machinery--may, therefore, find survival in the future no more difficult than it is today. But for the smaller, more experimental and less-well organized groups, and the organizations which are not operated on a non-profit basis and so do not live by philanthropy, a state of financial crisis may not just be perennial--it may well grow progressively more serious.[2]

In our study of the theatre, we are examing what has happened to the economic condition of the live professional theatre in America over the past ten-odd years. We are investigating whether or not the cost-revenue squeeze diagnosed by Baumol and Bowen has become progressively worse, as they predicted, with all the attendant adjustments this would necessitate. We are also examining some of the factors that could account for the patterns in the economic condition of the theatre that we observe over the last decade.

The theatre is particularly interesting in this regard because, unlike the other traditional live performing arts, theatre is produced by both for-profit and not-for-profit organizations. We should expect to see particularly dramatic responses to economic factors in the case of for-profit producing organizations, for these are ineligible for any significant form of philanthropy.

The data we are examing show, somewhat surprisingly, that theatre activity has been stable or has grown over the last decade. In particular, the data seem to be showing the following:

1. Current dollar investment in Broadway productions has grown over the period 1965/66 to 1976/77 at the rate of approximately 5.9% per year, as is shown in Figure 1. While we do not have an index of the rate of inflation in the cost of Broadway productions, if we assume that these costs have increased at approximately the rate of the wholesale price index over the same period (approximately 5.9%), we conclude that in constant dollars, investment in Broadway productions has remained approximately constant.
2. The number of productions on Broadway exhibits no trend over the period 1952/53 to 1976/77, as is shown in Figure 2. Data for an extended period do show a fairly steady decline in the number of productions over the period 1928/29 to 1952/53. Since then the number of productions seems to have fluctuated with no sign of any trend.

Robert J. Anderson, Jr., Vice President and Director of Economics, and Sonia Maltezou, Senior Economist, Mathtech, Inc., a subsidiary of Mathmatica, Inc., Princeton, New Jersey.

5. The estimated rate of return on investment in Broadway productions over the period 1964/65 to 1976/77 averaged 13.18%.[3] We do not know how this compares with returns in the past, although reportedly it has been estimated that the rate of return on investment in Broadway shows over the period 1947/48 to 1957/58 was approximately 19.5 %.[4]
4. The operating budgets of 30 large not-for-profit theatres grew at an average annual rate of approximately 9.1% per year over the period 1965/66 to 1975/76, as is shown in Table 1. This compares with a rate of growth of the wholesale price index of approximately 5.9% over the same period, indicating a real expansion in the activities of these theatres.
5. These same 30 large not-for-profit theatres cover about the same percentage of total operating expenditures out of box office earnings today as they did in 1970/71 (see Table 1). This is quite remarkable in view of the rapid rate of growth of operating budgets.
6. The number of productions undertaken by 30 of the larger not-for-profit professional theatres has remained roughly constant (see Figure 3), while the number of performances has grown considerably (see Figure 4).

These findings are at least mildly surprising in light of the compelling logic which underlies the prognosis offered by Baumol and Bowen for the live performing arts. If the cost-revenue patterns they foresaw had been realized, we should have expected to observe the profitability of investment in Broadway productions decreasing over time, with attendant decreases in productions and in the level of investment. This seems not to have happened. In the case of the not-for-profit theatre, we would have expected to see increases in the proportion of operating budgets provided by contributions over time, declines in real operating budgets, and declines in producing and performing activity. These also seem not to have happened.

What accounts for these surprises? The answer is simple. There has been considerable scope for "economizing" the operations of theatre organizations. Broadway producers apparently have tended to employ lower-salaried cast members than in the past; cast sizes have fluctuated with the times; orchestra sizes for musicals have decreased; ticket prices have increased; new marketing initiatives have been undertaken. Not-for-profit producers have extended their seasons while holding number of productions roughly constant, thus spreading fixed production and administrative costs over a larger number of performances; touring also has extended the economic life of some productions; marketing initiatives have been undertaken, with the result that these theatres now fill an increasing percentage of capacity.

This economizing behavior may not, of course, be an unmixed blessing. Smaller casts, smaller orchestras, higher ticket prices, fuller houses, larger houses, lower-salaried casts, sparser sets, may all detract from the artistry of the theatre. Unfortunately, we have no way to judge the extent to which the economic condition of the theatre has been maintained and/or improved at the expense of artistry.

Footnotes

1 William J. Baumol, and William G. Bowen, Performing Arts: The Economic Dilemma (New York: The Twentieth Century Fund, 1966), pp. 10-11.

2 Ibid., pp. 10-11.

3 This does not include any analysis of return to National Touring Companies spawned by the parent Broadway Company, and since we believe these operations to be more profitable, on the average, than Broadway operations, this rate of return probably understates overall profitability of the combined parent company/wholly owned touring company operation.

4 Reported in Moore, Thomas Gale, The Economics of the American Theatre (Durham, North Carolina: Duke University Press), 1968.

Table 1

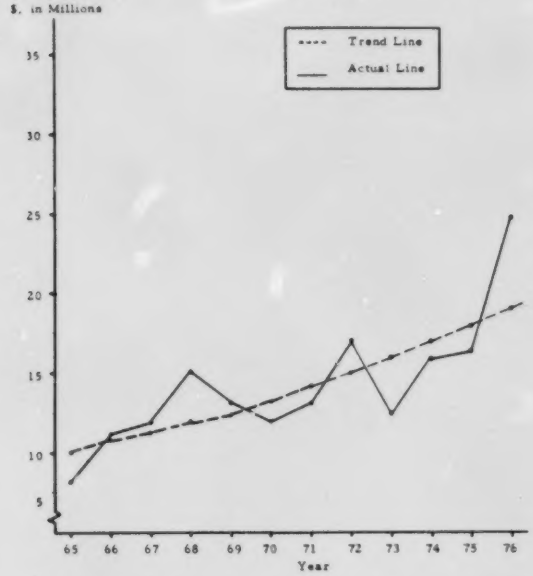
BUDGET INFORMATION FOR THIRTY NOT-FOR-PROFIT THEATRES; SELECTED YEARS

YEAR	OPERATING INCOME						Total Operating Expenditures (dollars)	Surplus (+) or Deficit (-)	Percentage of Earned Income to Total Oper. Expenditures	Percentage of Unearned Income to Total Oper. Expenditures
	EARNED INCOME		UNEARNED INCOME		TOTAL INCOME					
	Amount $	Percentage to Total Income	Amount $	Percentage to Total Income	Amount $	Percentage				
65-66	8,920,997	76.6	2,732,489	23.4	11,653,486	100.0	11,955,735	- 302,249	74.6	22.9
67-68	13,193,985	71.2	5,335,473	28.8	18,529,458	100.0	19,929,917	-1,400,459	66.2	26.8
70-71	14,110,660	67.3	6,856,740	32.7	20,967,400	100.0	21,187,170	- 219,770	66.6	32.4
71-72	14,409,965	64.9	7,798,707	35.1	22,208,672	100.0	22,133,318	+ 75,354	65.1	35.2
72-73	16,953,817	63.5	9,742,137	36.5	26,695,954	100.0	25,978,747	+ 717,207	65.3	37.5
73-74	17,475,241	63.2	10,154,799	36.8	27,630,041	100.0	27,660,029	- 29,988	63.2	36.7
76-77	23,482,928	65.1	12,569,323	34.9	36,052,251	100.0	37,166,244	-1,113,993	63.2	33.8

Source: The Condition and Needs, Chapter III, op. cit.; sources of data: 1965-1974 data from Ford Foundation, Survey of the Performing Arts; 1976-1977 compiled from statements for each theatre.

Figure 1

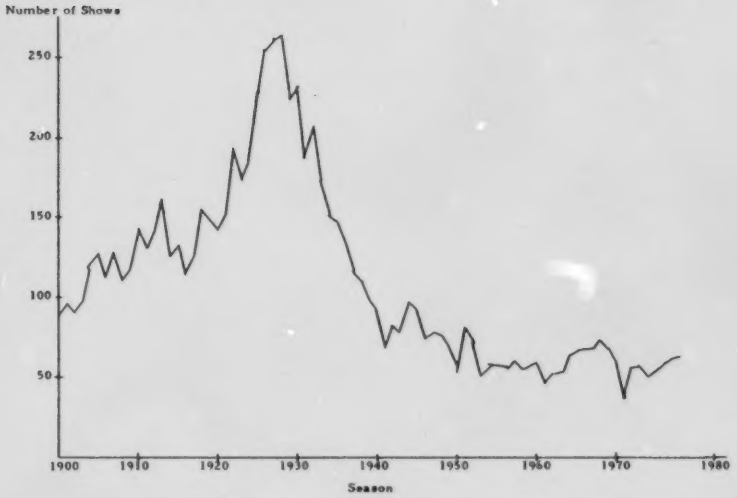
TOTAL CAPITALIZATION OF NEW PRODUCTIONS (MUSICALS AND PLAYS) PRODUCED ON BROADWAY



Source: Estimated from average production costs, Chapter III, The Condition and Needs of the Live Professional Theatre in America (hereinafter cited as The Condition and Needs), R. J. Anderson et al., MATHTECH, Inc. (forthcoming). Prepared for the National Endowment for the Arts.

Figure 2

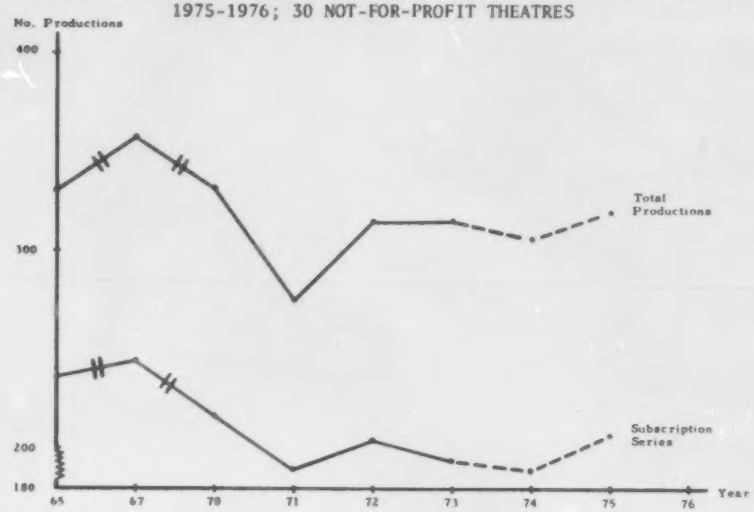
TOTAL NUMBER OF PRODUCTIONS PER SEASON PLAYING ON BROADWAY, 1900-1977



Source: Reproduced from the Condition and Needs, Chapter II, op. cit. Data source: Variety, June 8, 1977.

Figure 3

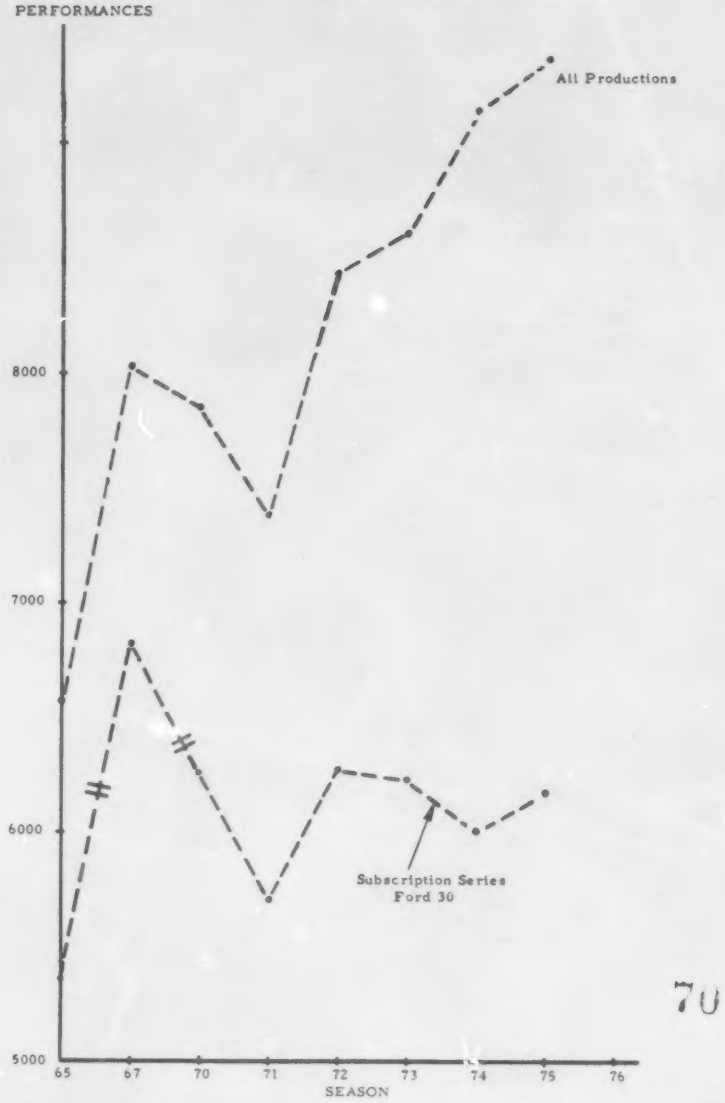
SUBSCRIPTION SERIES (MAJOR) PRODUCTIONS AND TOTAL PRODUCTIONS: 1975-1976; 30 NOT-FOR-PROFIT THEATRES



Source: Reproduced from the Condition and Needs, Chapter II, op. cit.

Figure 4

NUMBER OF PERFORMANCES 1965-1976
30 NOT-FOR-PROFIT THEATRES



Source: Reproduced from the Condition and Needs, Chapter II, op. cit.

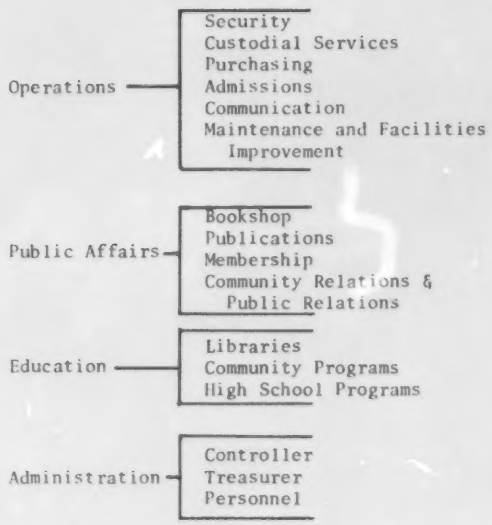
The Development of Museum Management Tools

Barbara Vilker

Museum operations and programs reflect a broad range of institutional goals which vary among museums by their subject classification (art, history, science, and subcategories), their current and target audiences, and their range of purposes (cultural, preservation, education, research).

For many reasons, management control systems in museums have been weak. Traditionally, museum professionals have emphasized product quality rather than management and control. External reporting requirements to auditors or trustees tended to be unsophisticated, and elaborate internal reporting systems were unnecessary. Consequently, museums were not forced to develop them. Moreover, budget constraints did not encourage the addition of management skills at the expense of technical skills. Today, however, increasing financial problems require the development of management systems that meet a dual purpose: optimal allocation of present resources to meet museum needs, and support of efforts to generate new revenue.

To ensure that an organization's efforts directly relate to and carry out the organization's goals, management must have an effective set of tools by which to evaluate organizational performance. Development of these tools in non-profit organizations is more difficult than in the private sector, because universal measures such as net profit, earnings per share, and other measurement and evaluation tools are usually not available or not appropriate. Also, the split between fixed and variable costs is often questionable. Some costs called variable may indeed be fixed because of management's limited ability to influence them. However, museums have many functions that may be measured in the same manner used by profit-making institutions. Examples are bookshops, print shops, cafeterias, etc. Management tools to monitor these kinds of functions should be similar to normal income statement measures and ratios, e.g., sales contribution to overhead and changing contribution over time. If costs are greater than proceeds, one may question continuing the activity. Decreasing contribution over time may signal lack of attention to the area. Further, many areas in museum operations are either similar or identical to operations elsewhere. Some are as follows:



For these areas, the team members will draw upon their past experiences in developing management tools for other organizations.

In approaching this project, CCG has developed a program that relies on roughly 100 interview with knowledgeable and representative museum personnel. Individuals were selected in order to be representative of management functions and other factors such as museum type, geographical location and operational size. Prior to implementing the interview process, CCG developed a descriptive model of museum functions and currently utilized management tools. This model was based on current research studies, pilot interviews, and discussions between the Museum Advisory Panel Research Sub-Committee and the CCG project team.

This descriptive model will be used as the interview framework and will be continuously adjusted during the interview process. Tools will be developed not only in response to expressed needs but against the background of a normative model of the

Barbara Vilker is a Consultant, CCG, Inc., Cambridge, Massachusetts.

tools that should be available to museum managers. As tools are developed, they will be evaluated by the research team in two ways. Each tool will be examined to assure that it is workable in principle and that data are available for input. Subsequently, a group represenative of potential users will evaluate each tool and tools will be modified or deleted based on their accounts.

Qualitative and Quantitative Measurement

Typically, qualitative measures are the only articulated effectiveness measures for output of non-profit institutions. Yet, since they can only be defined in a subjective manner, qualitative measures are difficult to use as management tools. Because quantitative measures are easier to work with when using a performance measurement system, every attempt will be made to identify a set of substitute quantitative measures for qualitative measures.

For example, "prestige of exhibit" is an unmeasurable qualitative output. Management may select other indicators (to substitute for prestige) which are measurable: general attendance figures, attendance figures for particular groups, number of published reviews, or number of published reviews in prestigious columns.

Selection of substitute indicators is highly dependent on the underlying goals and in some cases a substitute will not suffice. In these cases, the output may be assigned an arbitrary unit value, with related inputs still measured against this value. Thus, the measurement tools will allow directors to allocate resources against goals without preempting artistic decisions.

Effectiveness and Efficiency Measurement

When measuring performance and allocating resources against goals, both effectiveness and efficiency measures must be used. Effectiveness measures provide information on how well the organization meets its goals. If these measures are overemphasized, objectives will be met, but with disregard for related resource cost. Effectiveness measures may be divided into three subdivisions: quality, quantity, and timeliness.

*Quality: the degree to which objectives are satisfied.

*Quantity: the frequency with which objectives are met.

*Timeliness: the degree to which objectives are reached in the proper time period.

Efficiency measures provide information on how well the organization uses its resources in achieving any given output. Efficiency measures may be divided by type of resource being measured, e.g., labor, material, fixed assets, and money. Overemphasis of efficiency measures in non-profit institutions can lead to sub-optimal decisions because of the difficulty of quantifying many outputs. For example, with regard to "prestige of exhibit," careless use of efficiency measures could lead to substituting two low-prestige exhibits for one exhibit of high prestige but also higher cost. The organization may thus conserve resources only to find that it is not able to meet true objectives. Many museums are presently incurring what they call "the invisible deficit," a well balanced budget which hides the failure to attain goals because of cancelled exhibits, cancelled programs, and admission charges which prohibit attendance of certain community groups. Incorrect use of efficienty measures can increase the invisible deficit.

Efficiency measures can, however, be used profitably, as exemplified by measures such as "contribution per line of goods sold," "maintenance costs per square foot," and "return on endowment." Knowledge of the contribution to overhead provided by associated revenue producing shops and restaurants can help management decide where to expand or contract such operations or which product line is most profitable. Data on maintenance costs per operating day, collected over time and adjusted by a base factor, may show a change in the productivity of labor due to laxness or mis-scheduling of the labor force, or faulty equipment. Together with other information, this ratio can be a red flag to signal attention and possible remedial action. Similarly, the return on endowment may be compared with returns elsewhere and these data used to document a decision to increase attention to or to change investment strategy.

Organizational Compatibility

Because of variations in skills, attitudes, and data and time availability, management will differ in its abilities to use management tools to measure and evaluate performance. Therefore, a variety of simple as well as complex tools should be made available. Thus, organizations with varying abilities will be able to select tools appropriate to their level of sophistication. The best management tools can fail if the organization sees no direct usefulness for them and, therefore, does not commit to their use. To facilitate corrective action, measures must be related as closely as possible to specific organizational components such as maintenance, administration, or curatorial function. Finally, there must be an identified individual or group with responsibility and authority for monitoring the measures and suggesting corrective action or control procedures to museum management.

Performance Standards

Measurement tools must be related to pre-established standards. Use of standards will allow museum management to determine whether improvements are being made. Initially, these standards may simply be derived from the organization's past performance. After the system has been in use for several years, sufficient data should then be available to develop normative or "should be" standards. For example, maintenance costs per viewing day may initially be compared to historical data. This allows management to know only whether they are doing better or worse than previously. After the measure becomes familiar to them and good data are available, management can set normative standards to evaluate ongoing operations.

Data Availability

Organizational data should be available without unreasonable effort as input to standards. If the cost of collecting data for management tools is excessive, management tools may cost more than they save. Department budgets, time cards, and complaints from staff and visitors are all convenient to use; and the data they provide should be considered first. The recent American Institute of Certified Public Accountants (AICPA) Discussion Draft contains a tentative set of accounting principles and reporting practices for non-profit institutions, including museums. If these or alternative suggested accounts were widely adopted, they would provide a convenient data source for management tools to measure performance.

Workshop: Evaluating three approaches to studying the condition and needs of cultural institutions

Moderated by Philip S. Jessup, II, of the William H. Donner Foundation, New York, this workshop sought to identify the needs of cultural institutions and how they might be met by one or more of the research approaches presented in the morning papers by Carol Grossman, Robert J. Anderson, and Barbara Vilker. The major portion of the workshop was devoted to the discussion of questions and issues posed by the audience.

The general view held by the audience was that the projects discussed in the morning would produce useful results for cultural institutions. However, some concern was expressed as to whether the results of national or state-wide studies would be widely utilized. Two problems were identified. First, local communities may not learn of the study findings, and second, many administrators at the local level may not have available the expertise to apply research results. It was suggested that technical assistance at the state level may be necessary.

In discussing the need for aggregate national data on the arts, it was noted that many institutions feel overburdened with questionnaires from many sources, each of which asks for similar information utilizing differently constructed survey instruments. Consequently, there was a plea for standardization of the data collection instruments, while researchers expressed concern over data comparability, even should questionnaires be standardized. This appeared to be of particular concern in regard to the collection of financial information, since differences in accounting procedures could destroy comparability among organizations.

Several persons suggested that research was needed in the area of social aesthetics, to help institutions clearly identify the product or service that they offer the community. While much time and effort has been devoted to the economic effects of institutions, very little has been done to examine or measure their principal product, "the arts experience," and its benefits.

The closing segment of the workshop was devoted to small group discussion of a case illustration featuring a hypothetical state arts agency faced with problems in obtaining funds from the state legislature. The agency was set in a principally rural state that had a low general public awareness of the arts. The approaches suggested by the groups varied from the use of surveys to test the level of public arts awareness to the use of various lobbying techniques.

Research on the American Artist and Craftsman

Session Chairman:
James L. Burgess, Chairman
Maryland State Arts Council

Changes Over Time in Artistic Potential and Productivity

Frank Barron

On a national scale the project titled the National Assessment of Education Progress (NAEP) (funded by the National Center for Educational Statistics) is the most significant effort now being conducted by the federal government to assess educational progress in the arts.

NAEP is designed to measure the educational attainments of individuals at four age levels: 9 years, 13 years, 17 years, and young adulthood, reckoned as ages 26-35. The first round of assessments in art was in 1974 and the first reassessment will be in 1978-79.

Art (by which is meant the visual arts of painting, sculpture, and photography, with an occasional nod to architecture) is but one of 10 educational areas assessed by NAEP. Through the good graces of the responsible administrators at NAEP, I have had access to their unpublished results as well as to officially released information, and so I can give you a tentative indication of the direction in which they seem to be going, as well as summarize the published findings. I have also taken part in the process of exercise review for the 1978-79 reassessment, and I shall try to give you the benefit of some of that experience.[1]

Each year, three or four of the 10 learning areas examined by NAEP are evaluated by administering tests or exercises to a sample of some 25,000 individuals at each age level, selected so as to give a good representation of the main regions of the country and major ethnic and social groups. Each learning area is reassessed every three or four years. Inasmuch as the study is cross-sectional, it would be purely by chance if particular individuals were reassessed.

No record is kept of the individual respondents' identity, and the results are not compiled by individual. Thus, by intention, the results cannot have any consequences for the individual in terms of educational placement or counseling. While one cannot but applaud this respect for privacy, it must be recognized that it has important consequences for the analysis of data.

What Students Know and Can Do is the title of the overall report published by the NAEP in March, 1977.[2] It breaks the results down into three broad groupings: what most, many, or few students know and can do. In what follows, I have generally given the exact percentages as well.

There are three components in the NAEP Art Assessment: performance, knowledge, and attitudes. Findings have been reported for the first two of these three age groups; ages 9, 13, and 17. The report on attitudes is still in preparation and so cannot be reviewed.

NAEP researchers evaluated performance by using four performance tasks or problems. Students were required to draw three children in a playground with each child successively farther away; to draw four people seated at a table, a more complex representation of perspective; to draw an artistic design intended to cover a bedroom wall with an off center door (the unstated challenge was to integrate the door into the design rather than simply use the wall alone); and, finally, to draw a picture of a person running very fast. By design, the first task was given only to the 9 year-olds. Due to an unexpected reduction in funding, the 17 year-olds were not given the last task.

Successful completion of each task was assessed in terms of task specific perspective and design characteristics, with NAEP results presented in terms of successful student performance percentages. For example, the first task required the playground figures that were farthest away to be drawn not only higher but smaller, with more varied and complex and design requirements associated with each succeeding task. Successful performance required that a sufficient number of perspective and design elements be included.

About 40 percent of the 9 year-olds were able to draw an artistic design on the bedroom wall; but only 12 percent included the door as part of the design. This compares, respectively, with 55 percent and 20 percent of 13 year-olds and 60 percent and 48 percent of 17 year-olds.

Only 21 percent of 9 year-olds were able to draw a picture of a person running very fast (e.g., figure leaning, arms and legs bent and properly directed) as compared to 25 percent of 13 year-olds.

Only 23 percent of 9 year-olds included enough perspective elements to be considered successful at drawing four persons at a table, compared to 42

Frank Barron is Head of the Laboratory for the Psychological Study of Lives, University of California, Santa Cruz.

percent of 13 year-olds and 51 percent of 17 year-olds.

We are not given a great deal of information beyond these bare performance percentages. We do learn that solutions to the classic problems of representing perspective and of integrating elements into a design increase with the age of the respondent. Essentially, the ability to produce a more complex synthesis increases with age. However, the findings cannot be related to developmental theory in any specific way. The increases over 4-year periods in some performance items are so slight that, as developmental gradient items, the problems examined are not likely to show much diagnostic power. By contrast, the stages of development posited by Jean Piaget, as well as the psychometrically defined mental age levels used by Alfred Binet, are sharply drawn.

Moreover, there is a basic logical problem in the interpretation of these results. Is the increase in successful solutions a function of maturation, of eduation, or of some combination of the two? We have no way of knowing; the research design does not anticipate this question. While there is a slight positive association of success percentages per item with opportunity to receive art instruction, the increase does not reach significance until the comparison pits 17 year-olds who have had 5 or more classes against all others of that age group. It seems likely that cognitive development alone acounts for the increase in these highly selective performances. There is also a strong possibility that part of what is being measured is constant error in the form of test-brokenness (docility in relating to test-demands) and verbal comprehension. My own experience in giving visual art exercises to children, especially those from minority cultural and language groups, is that they are severely penalized unless the test administrator makes a special effort to communicate the explicit and implicit production schedules demanded by the test.

NAEP researchers assessed knowledge about art in terms of three components: 1) recognition of elements; 2) art history; and 3) grasp of the criteria for judging an art object as esthetically good. This latter component was not measured by asking students to make judgments and then comparing their judgments and the bases for them with the opinion of experts. That approach was rejected by the NAEP assessors in favor of establishing whether students could recognize as being appropriate criteria that researchers stated verbally. This is an important departure from established methods in measuring esthetic judgment, and in what follows we shall take a close look at its effectiveness.

The elements of art were first specified as (1) content and (2) form. Content was divided into literal and symbolic subject-matter, while shapes, lines, colors, and textures, and their interactions, were identified as the components of form. From these distinctions, several questions were framed which the assessment was designed to answer:

a. How successful are students in recognizing symbolic meaning as opposed to literal meaning?
b. To what extent can they recognize the contribution of formal elements (such as line and shading) to the creation of a mood, or
c. To what extent can they abstract from a painting the geometric principle(s) on which it is constructed?

Some examples of items (exercises, to use the NAEP term) may serve to make this clearer.

On the average, 110 exercises were administered at each assessment age, requiring a total of 130 minutes of assessment time. Half of the exercises have been released; item statistics for the released items may be found in a December 1975 NAEP report titled ART: Released Exercises (1974-75).

Eighty percent of all exercises were given to all three age groups; and of all exercises given to the 13 and 17 year-olds, 95 percent were given to both.

Here are some items designed to answer the first question, "How successful are students in recognizing symbolic meaning in art?"

Picasso's Guernica is shown in a 2 x 4 inch black and white reproduction at the top of a page, and under it appears the following:

> The painting above represents the bombing of the town of Guernica during the Spanish Civil War. Some of the objects in the painting have symbolic meanings. For example, the woman's dead child might represent death. At the bottom of the painting there are a warrior, a broken sword, and a flower, which also have symbolic meanings. The instructions are: 'For each of the objects shown on this and the next page, mark the statement which best describes what you think the object means or symbolizes.'

Details from the painting are then shown, and specific questions are put. Here is an example:

A. The Warrior means or symbolizes
( ) the courage of fighting men
( ) the suffering of fighting men
( ) the death of fighting men
( ) the power of fighting men
( ) I don't know

Death is the keyed answer, the warrior obviously being dead.

Still another item (from another painting) shows an emaciated horse ridden by a skeleton carrying a scythe, and the question is put, "What does the skeleton most likely represent in this drawing?" The alternatives presented are Death, Freedom, Hatred, and Violence, with Death, of course, being the keyed response.

(Incidentally, in the Art History component, a painting showing the death of Socrates is presented, with a question, "What historical event is shown in this painting?" The alternatives are Marc Anthony's funeral oration, the Last Supper, the Feast of Herod, and the Death of Socrates. Death is big everywhere, of course, and especially in Art, so it no doubt should have its share in Art Assessment. However, one does worry about sampling from the point of view not just of subjects sampled but of themes sampled.)

But to return to the testing of the ability to perceive the meaning of symbols in the way presumably intended by the artist, let us look at the final item relevant to this ability. Here the famous painting of St. George slaying the dragon is presented full-page, and the question is put, "What is the MOST IMPORTANT meaning of St. George and the Dragon, shown on the next page?" The alternatives are: the force of good overcoming the force of evil; the importance of courage; St. George slaying the evil Dragon; the struggle of righteousness. The first alternative is keyed. (80 percent of these items, it should be remembered, are given at all three age levels; one wonders how many 9 year-olds know just what they mean by the mark they obediently make on the answer sheet.)

Recognition of the contribution of formal elements to create an overall effect (such as mood, or impression of movement) is tested not directly but by

presenting pictures with varying degrees of the quality in question and asking which one (of, for instance, four alternatives) "shows the greatest amount of movement." Abstraction of principles of construction is tested by asking the respondent to trace out (for example, on a painting of Madonna and Child) the hidden triangular shapes that are important to the composition.

The NAEP report gives us only the barest summary statistics for age progression in ability to deal with these exercises, and the exercises at no point are related specifically to the stated objectives of the assessment. (In extenuation, it might be noted that the report from which I am drawing is a draft copy completed in September 1977, which is, at this writing, in the process of revision.)

From this draft we do learn that there is a clear increase with age in art knowledge overall. This is shown below.

	NINE YEAR-OLDS		THIRTEEN YEAR-OLDS		SEVENTEEN YEAR-OLDS	
	%	S.E.	%	S.E.	%	S.E.
Mean National Performance	37.52	.46	43.15	.26	47.66	.35

The percentages given are PASS percentages for multiple-choice items with 4 alternatives and an opportunity to mark "I don't know."

Discussion

Once again, it seems that we have not learned anything at all systematic from these results. The increase in % PASS could just as well be a function of verbal comprehension (and knowing what an alternate-choice test wants you to do) as of real knowledge or discernment. The items themselves are not linked to any theory of cognitive development or of rate of educational attainment of comparable knowledge of skills, so we are left with the barest of bare facts.

We are told, of course, that success in passing these items is related to parental education (the more the better), to ethnicity (whites do better), and to region (the metropolitan northeast U.S. fares best). There is a slight but consistent positive relationship also with whether the school offers art classes, and with other art-related activities, but these in turn are usually related to parental education, ethnicity, and region.

In order to clarify these results, several steps need to be taken:

1. Exercises used in the national assessment should be correlated with other measures for which there is extensive normative data of known meaning already available. Some simple examples include the widely used Goodenough Draw-a-Person test in the area of performance, the Child Esthetic Judgment test or at least some items from it that would provide a good estimate of total score, and perhaps some perceptual-cognitive measures such as the Gottschaldt Embedded Figures test, the Street Gestalt test, and the Gough-McGurk Perceptual Acuity test (which includes as test items many of the classical illusions that have already been intensively studied by psychologists).

In brief, the National Assessment's brave effort to create items de novo and its concern to maintain confidentiality have severely constrained the analysis and interpretation of results. The only remedy I see is to enlarge the item pool and administer it to a very much smaller sample (after all, the national public opinion polls typically use only 1500 respondents). For this special study, the identity of the respondent should be coded for all items and scales, and all the measures should be intercorrelated and factor analyzed. This should be done across areas of learning. Statistical interactions with region, age, ethnicity, sex, and education of parents, as well as with fuller information about either field experience or experimentally produced educational experiences should be determined.

2. The exercises should be administered individually in an interview format to an even smaller sample, again very carefully selected to be as representative as possible of the demographic variables around which the project has been organized to date. This is especially important as a means for identifying constant error, such as biased cultural content or simple verbal comprehension or even speed of response. The questionnaire-type exercises, as noted above, can be filled in by a respondent who knows nothing and cares nothing about the meaning of the question, and it is important to make a sophisticated estimate of this sort of error.

3. A set of experiments designed to answer the big question as to whether the results reflect innate factors in psychological and mental development rather than education would be included in the overall program. In art, for example, one such experiment could take the form of a standardized videotape lesson in perspective, its history in the visual arts, and how to represent it in the kinds of problems the assessment has focused on. The hypothesis could then be tested that specific educational influences can accelerate development of perceptual cognitive abilities in art.

4. The assessments should provide more opportunities for the respondents to use imagination, in that broad sense of the term in which imagination is seen as the originator or transformer of reality. The hallmark of the creative intellect is the ability to generate, produce, and use symbols and metaphor (or analogy). This is important in all areas of learning, but especially so in art.

J. P. Guilford's empirically based model of the structure of intellect recognizes creativity as a special domain, within which there are such demonstrably educable factors as originality; spontaneous flexibility; associational, ideational, and expressive fluency; and finally, most important, the ability to transform systems of meaning. And these factors operate in feelings as well as in cognition. We are stirred to new, often unverbalizable feelings by great art. The poet W. B. Yeats put it this way: "All sounds, all colors, all forms, either because of their preordained energies or because of long association, evoke indefinite and yet precise emotion...and because no two modulations or arrangements of these evoke the same emotion, poets and painters and musicians...are constantly making and unmaking mankind."[3]

Yeats in this passage suggests not only the transformative power of art, but also its ability to cross over the domains of audial and visual images. To return to our immediate concern, an assessment of "what we know and can do" should be so designed that imagination in an area such as writing can be correlated with imagination in the use of numbers, forms, sounds, and colors. The national assessment of educational progress should allow us to seek out relationships that may advance basic questions of theory in mental functioning. Otherwise, it stands in danger of marring its otherwise substantial achievements by the waste of an important opportunity.

In saying so, I should be in danger myself were I not to add that the NAEP visual arts assessment is moving toward change in some of the ways I have suggested. A very promising performance item in imaginative visualization from a scene first set in words has been pre-tested and will be included in the

1978-79 assessment. So, too, will be condensed versions of some standardized measures of esthetic judgment and preference. And certain new items of information relevant to this Endowment's research interests will be added to the questionnaire sent to school principals in order to help define the educational context in which students are learning. The effect of extracurricular exposure to the arts is, of course, central to our concerns.

Yet these changes still leave untouched some of the problems I have tried to pinpoint in this report. The meaning of NAEP statistical findings can probably be best understood when the same exercises are employed in a new study having the features suggested above.

Footnotes

1 I am trying this year to review efforts aimed at assessing progress in the arts and to write a monograph on this topic as one of the three projects undertaken while on I.P.A. Mobility Assignment at the Research Division of the National Endowment for the Arts.

2 Mullis, Ina V. S., Oldefent, Susan, J., and Phillips, Donald, L., What Students Know and Can Do. A monograph prepared under Contract No. OEO-0-74-0506 for the National Center for Educational Statistics. Published by the National Assessment of Educational Progress, 1860 Lincoln St., Denver, Colorado, 1977.

3 "The Symbolism of Poetry" in Yeats, W. B., Essays and Introductions, New York: MacMillan Co., 1954.

Perspectives on Assessing Actors' Employment and Unemployment: Some short and long term problems on research into the arts

Philip H. Ennis

In the Spring of 1976, I directed a study, with John Bonin's collaboration for the Research Division of the National Endowment for the Arts.[1] Its objective was to find out if the routine statistics gathered by Actors Equity Association could be used to give accurate and continuing estimates of employment and unemployment in the American professional theatre. The occasion of the study was the recognition that the statistics on these questions gathered by the Federal government differed substantially from those gathered by the performing arts unions. This was and is a matter of some moment.

This is an appropriate time to begin a discussion which connects short term policy to the larger and deeper considerations which will form an American National policy for the arts. This requires, in my judgment, a more theoretical, a more abstract statement of what the arts are and how they do what they do. It also requires a concrete consideration of how that national arts policy is to be moved forward.

You will understand what I am going to say much better if I precede this report with a brief view of Baltimore and its cultural institutions.

I was born in Baltimore and spent the first eighteen years of my life in its streets, woods, schools and in almost all of the cultural institutions created by the men and women important to Baltimore's past. As a youngster I was taken to the symphony and to the museums. I was taken to the opera, destroyed forever for me by a travelling company doing Pagliacci and Cavalleria Rusticana. Pagliacci, in the middle of the passions of his betrayal, sang just as I heard him on the radio with Milton Cross purring the story done by the New York Metropolitan Opera Company's stage. But being the tacky company it was, the knife held aloft in desperation, rehearsing the steely blow to be delivered, waggled like the rubber knife it was. So much for opera for a twelve year old kid.

I was also taken on some occasions to the theatre, the old Ford theatre downtown. That worked! That really worked. But so did the Saturday movies at the Forest Theatre near the corner of Garrison Boulevard and Libert Heights Avenue. Every Saturday. And on occasion so did the Hippodrome theatre, also downtown, huge, purple lights, the organ, the stage show, the movie. And then later down to the Gaiety theatre on East Baltimore Street where the crackerjack, the comedians, and the luminous Valerie Parks made burlesque a part of my arts education. On to Johns Hopkins, where it was beer and the discovery of James Joyce, the limerick, and World War II.

All of this while my family held on during the Depression and the war, doing the American search for their middle class place. Everything counted for me. Books from the Enoch Pratt branch library, radio at home, calendar art, the comics. If I was indiscriminate in what delighted me, or bored me, my parents tried to set the Parade of the Muses, the ordering of the arts, in a fashion of Baltimore respectability., It didn't work. I regard all of the arts as cousins.

There are two ways I would like to reach those larger issues about the arts, both of which, not surprisingly, lead me to the same conclusions. The first way has to do with our research process, signalled by the name some of us are now called, that is, "art researchers." This name carries, at least to me, the connotation of a social science gun for hire. It indicates an excessive commitment to policy-linked research at the expense of a commitment to basic research in the arts. They should be roughtly equal. The results of this imbalance are distortions in the way new knowledge in the arts is accumulated and disseminated to both the artistic and the social science communities.

For example, after brief but intensive field work with the Actor's Equity Staff, we were able to describe Equity's statistical data sets. They are varied, complex, and funny in the sense that, side by side with a superbly efficient, computerized accounting of all Equity's members' employment and compensation records is a Dickens-like quill pen operation which also functions magnificently in keeping track of every contractual obligation actors make with producers, and these indeed are complicated contracts. Out of this mix of modern and archaic data gathering practices, we recommended to the Endowment that it was possible to secure reliable and continuing measures of actors employment and compensation. In order to do so, a series of politically sensitive steps would have to be taken by Equity and its main sister unions, AFTRA, SAG, and AGVA. The reason is that a sizable but presently unknown proportion of actors

Philip Ennis is Chairman of the Department of Sociology, Wesleyan University, Middletown, Connecticut.

who make up the professional core of American theatrical life work alternately and/or concurrently in television, movies, the stage, and clubs, that is, under the jurisdiction of more than one of the different unions in these media.

The total theatrical employment of any individual actor, therefore, can be measured only by consolidating the Pension and Welfare Fund records of all those unions to which he or she belongs. The urging of all that consolidation was our first recommendation. We suggested, in addition, that the Endowment sustain a research instrumentality empowered to and capable of analyzing those consolidated records. Nor do they now have established channels of communication which can bring those measures into the political process of stabilizing or remedying the chanciness of the theatrical career.

Our second recommendation dealt with measures of unemployment in the theatre, a highly visible and heated issue in the industry. We concluded that there were no extant statistical series collected by anyone that could provide the relevant data. It would require, we stated, a specially designed sample survey from the universe of members of the theatrical unions. Further, a parallel sample survey carried out by the Bureau of Labor Statistics of the Census Bureau would be necessary to reconcile their radically different estimates with Equity's estimates as to the number of persons in the theatrical business and the rates of unemployment they experience.

In the course of exploring these rather straightforward problems, the complexities of American theatrical life became more apparent to us. We were puzzled as to how the particular social arrangements of the theatre worked. I mention here only three of those deeper puzzlements.

One is the institutional complexity of theatre. This is manifested in the fact that Equity has twenty different kinds of contracts with theatrical producers, ranging from Broadway to Off-Off Broadway, to Youngs People's theatre to non-commercial and Resident theatres. It is further manifest in the occupational fluidity of theatrical personnel across media boundaries, from stage to films, television, etc. The complexity is also seen in the participation of theatrical personnel and resources at every artistically known brow level, making the classifications of high-culture, mass-culture, and middle brow cultural levels once more mischievously irrelevant to the understanding of what is actually happening in the arts.

The second puzzlement is geographical. Theatre is spread across the national landscape in an extremely complex tangle of concentrating vs. dispersing tendencies which cross cut the war between the forces who "stay at home, we will bring theatre to you" as opposed to those who say "come on out of the home for your theatre." The results of these sets of struggles give the law of raspberry jam--the wider you spread it the thinner it gets--a new urgency for study.

The spreading had gotten pretty thin when in my town of Middletown, (pop. 40,000), the city's Commission on the Arts and Cultural Activities announces that grant applications up to "amounts of $250 are being sought by the local commission for well planned activities in art, music, drama, dance, crafts, film/photography, and city beautification."

The third puzzle is amateur vs. professional artists. Equity won't hear of amateur theatre, but it is there, in strength unknown, but presence necessary.

We expressed these and other puzzling issues in our research recommendations. Yet, I fear that the conception and organization of the Endowment's research is such as to preclude the basic research necessary to unravel them. This is especially distressing given the Endowment's longer range purpose with respect to theatre and the other performing arts. The details of that purpose are still in formation, but its direction is clear. It is to build some kind of financial floor under the theatre. How is this to be done? What agencies of State and Federal governments will administer the programs; how much money will be dispersed to which artists, production companies, in what manner and by what criteria, with what effect on new or existing theatrical institutions? All these questions must await, even for their proper formulation, the completion of the Endowment's work on its theatres projects. But if there is no basic understanding about how theatre works in its present situation and how it worked in the past, think how difficult it will be to make sense of it, not to speak of guiding it, once some entirely new and consequential changes are made via large-scale Federal financial support.

This brings me to the second way of thinking about a national arts policy that I mentioned earlier. It is a way that begins with the social structure of the arts at an abstract theoretical level. All the arts I have studied and read about have a social structure consisting of four basic positions or functions. These are, artist, distributor, audience, and critic. Each of these four has a specific and different operating code which requires that they all cooperate with each other, but which also produces serious and continuing tensions between and among the positions.

The artist works under the aegis of two master norms. The first is, in I. A. Richards' words, "the artist's job is to get it right," shorthand for what we usually term the mixture of artistic creativity and integrity. The second norm is to communicate, somehow to someone. There are innumerable modulations by which responsiveness to these two normative imperatives can put the artist in conflict with himself and/or others.

The distributor's imperative is to select among the works of artists, to organize a show, a series of shows, for an audience in a safe place in such a way as to make a steady living.

The critic's job is to be able to read the stream of art works, that is, to be knowledgeable enough about the art form to be able to elaborate a set of standards of evaluation and to apply them. He tries to tell a good one from a bad one and to persuade the rest of the participants in the system of his judgment. The audience does what it always has done, that is, to say simply yea or nay to what is offered. The audience is ready to give their time, dollars and value commitments to an art form and to particular artists. The problem here is that all too often they like what they know rather than know what they like.

The individuals in each of these four positions are to varying degrees familiar with, and share, in part, the perspectives of the other positions. But by virtue of their position they differentially emphasize, they are differentially constrained by its operating code. All four, however, share a common affection for and defense of the particular art form. They are inside. Their joint commitments constitute a social boundary that makes the particular art form a more or less separate sub-system within the larger society. These commitments also form a semi-permiable barrier with respect to adjacent arts in some kind of evaluative order, even as they exchange personnel, resources, ideas.

The structural position of the government vis-a-vis those sub-systems is therefore a problematic one. The governmental mandate, expressed variously in state and Federal statues is to "encourage and

support" the arts for all the people. Yet some of the people are non-audiences for any particular art form and some people are anti-audiences for all the arts. This fact creates an unavoidable and persistent tension on the government to accomplish several incompatible ends. The situation might be assimilated to the normal push and pull of multiple constituences fighting in the political arena for their share of dollars and influence. Indeed this has already happened; the nature of the politics varies from the noisy public squabbling in New York to the activist electoral style in California and the more subtle drawing room, board room, and backroom politics in other places. There is always politics in the arts.

There is yet a deeper source of difficulty in governmental support to the arts. The mandates of government arts agencies all circle around the mission of the arts as being one of civilizing the citizens into a celebration of their lives, and that of the nation. The arts are thus implicitly defined as instruments of education.

Who could argue with this? Well, there is a substantial body of thought which holds quite explicitly that "art is not school," that the arts are institutions of release not of commitment, that their mission is to realize, indeed to construct, an autonomous social reality. In the course of so doing some artists are going to break through previously established boundaries as to what art is and break through the categories defining what the different art forms should be.

Now this is recognized, happily, in the repeated reassurances by everyone who testifies before Congress or state legislatures and by those who administer the monies, that the government should do nothing to interfere with artistic freedom. Scepticism remains, as well it might, since the dilemma remains. How can the Federal (and state) government be inside the artistic system and thus defend the autonomy of that system and nurture it while at the same time be outside the system, in order to keep a watchdog's eye for "all the society." These problems should not be seen as just a cranky ideological resistance to an unwarranted governmental presence. In any case, it is too late. The government is in the arts, is in big, and promises to get bigger.

The situation is analogous to a familiar sociological phenomenon. It is what happens when a simple system of social interaction experiences some disruption. Doctor-patient-then Medicare. When, as is often the case, attempts to get it back to normal fail, the participants elaborate new arrangements. They generate a "complex system" which seeks to reach the sources of the initial disruption and to provide new positions, new norms and sanctions appropriate to the needs of the various participants.[2]

The elaboration of a complex system with new norms, sanctions, positions is now a central task for those interested in the arts. It is a task that was recognized immediately after the 1965 Federal legislation establishing the Humanities and Arts Endowment. In a fascinating symposium held at Robert H. Huchins' Center for the Study of Democratic Institutions, a paper by Gifford Phillips on "The Arts in a Democratic Society" was discussed by a panel of notables. At a dramatic moment the problematic role of the governmental presence is recognized and some social invention is begun. Howard Richards, lawyer and philosopher, says:

> The purpose of this discussion may be, in a sense, an attempt to state some rules for the practice of a new profession. This profession might be called that of trustee for the arts. This is not the same profession as being an artist, nor being a critic as criticism is practiced today, nor being a statesman, and certainly not that of being an administrator. The task of the trustee for art--this profession which makes the decisions about the allocation of resources--is the task of finding the artist. I propose that this must be by its very nature a pluralistic profession; that is, one that does not have one school of thought, but many.
>
> Ashmore: How does this differ from the function of the critic?
>
> Richards: There is a very important difference: the trustee has resources to allocate. My main reason for distinguishing this from criticism as it is practiced is that the critic himself is something of a servant with a product of his own to sell, and at least in that respect is trying to do some entertaining himself.
>
> Lipton: I would like to reiterate my point in favor of minimizing the area of decision by bureaucrats. I would not leave it to bureaucrats to make any decisions when merit or excellence is involved. I would leave it to those whose business it is by training and by knowledge, namely editors with regard to literature; museum directors with regard to art...
>
> Lichtman: That doesn't solve the problem.
>
> Lipton: No, nothing really solves the problem. Let me emphasize that. It's only a question of what presents the smallest hazards, where there are the least hang-ups. Let me remind you that art has flourished under all societies -democratic, dictatorial, tyrannical. The best society, I've been told by many artists, is a good commercial society in which there is lots of money and nobody knows anything about art. Give me a society which is corrupt and has corrupt officials who can be bribed! God save us from bigots and dictators who enjoy suppressing and are sincere about it!

It is more than likely that we will get both corrupt and bigotted officials, even if they are trained in the arts management programs proliferating in colleges and universities all across the nation. These programs, first called for in the Rockefeller Brothers report of 1965, do not and cannot, in my judgment, solve the problem. What is needed is a set of institutional counterforces to the government's presence. Through an extended period of experimentation these forces, when set to work, can create a complex artistic system which re-equilibrates the functions of its four basic positions.

How is this to be done? One answer is that it is already happening. Artists, distributors, critics, and audiences (in that order, I would guess) are already improvising ways to deal with the Federal and state presence in their arts. The second thing to be done is to repair the state of research into the arts. It is now fragmented across almost all disciplinary boundaries. It is scattered geographically. At the level of the Endowment it is restricted to a narrow policy guidance function.

Basic research into any new field requires several things more difficult to achieve than to prescribe. I list, for brevity's sake three of the more important. First, full and open discussion of all issues through a policy and practice of generous and full publication opportunities. Extensive

dissemination of research to attentive audiences is essential.

Second, the concentration of intellectual resources in time and space, which can nevertheless domesticate the evanescent nature of social science involvement in the arts and also does not ignore its geographical dispersion. A group of university and non-university located centers devoted to interdisciplinary basic studies in the arts spread across the nation is the goal I have in mind. This is a difficult task but one which is happily already on the way. The field is quickening. Alongside this untidy and uncoordinated growth, research into the arts needs its own equivalent of one percent law,[3] along with a strong but gentle centralizing focus. Third and finally, basic research must be articulated with the variety of arrangements which seek to readjust the social structure of the arts, especially those which attempt to reassert the autonomy of the artists.

The arts, all of them, are tough and will probably survive the new age of Federal patronage. They have a better chance if that patronage is scrutinized by an armed and loving eye, comprised in good measure by a devoted community of scholars dedicated to tracking their mysteries.

Footnotes

1 The basis of this paper stems in good measure from the experience in preparing a research report entitled The Statistical Data Sets of Actor's Equity Association: A Description and Analysis with Recommendations for Research into the State of the American Theater by Philip H. Ennis and John Bonin, Wesleyan University, submitted tothe Research Division of the Endowment for the Arts on February, 1977.

2 See Theodore Mills, "Equilibrium and the Processes of Deviance and Control" American Sociological Review, 1959, Vol. 24, No. 5, pp. 671-678.

3 The recent provision for one percent of Federal Funds for highway and other construction to be set aside for archeological research has created considerable consternation in the archeological field. There are simply not enough trained people prepared to use the research monies available, or to control and monitor free lance consulting firms which are springing up to fill the resultant research vacuum.

While there appears to be no immediate danger that research into the arts will face a situation like that in archeology, it seems prudent to begin now to assemble a nationwide research apparatus for the future.

Designing a Study of Craft-artists and Their Organizations

Constance F. Citro

The last ten or twelve years have seen a surge in interest in all facets of crafts activity that shows no signs of abating. Nationally, for example, there appear to be well over 2,000 craft organizations, of which, on the available evidence, over 40 percent were established in the period since 1965 and over 25 percent in the period 1970 to 1975.

Given the evident popularity of craft activities in the U.S. today, it is astonishing how little we know, in any comprehensive way, about the crafts world. We do not know how many craftpersons there are, nor how many are working professionally rather than on a leisure basis. We do not know their geographic distribution, educational background, economic status, or their preferred media and techniques. Similarly, we know very little about the activities of the wide range of institutions that directly or indirectly support craft production: associations of craftpersons, materials suppliers and equipment manufacturers, art and technical schools, colleges and universities with craft programs, publishers, craft shops and galleries, museums, and so on. We are ignorant, in other words, of the true role of craft production in the American society and economy.

A few small surveys related to crafts have been conducted in the last few years, but much remains to be done to obtain a full picture of the crafts field. In order to fill this knowledge gap and to better target its own programs as well as those of other federal agencies related to crafts, the National Endowment for the Arts decided to explore the idea of a national crafts survey. The Endowment contracted with Mathematica Policy Research a year and a half ago to carry out a review of existing information and to prepare a preliminary survey design.

The Endowment's original charge to MPR for the planning study was to cover all components of the crafts world, including the range of craft-supporting institutions and organizations. MPR was to determine what was already known about each component, develop preliminary estimates of their numbers and basic characteristics, design questionnaires, recommend survey procedures to be followed, and develop cost estimates.

However, it quickly became evident that to develop estimates of every type of craft artist and craft-related institution was not feasible. Information was simply too scattered and sparse in many instances. The Endowment and others to whom we talked were also clearly most interested in those craft artists who sell or exhibit their work professionally and, to a lesser degree, in the organizations or associations to which many of them belong.

Hence, we directed the bulk of our efforts to professional craft artists and, secondarily, their organizations. I can report here some of the things we learned and also our recommendations regarding the development of a comprehensive picture of each of the components of the crafts world. Such a picture is essential to permit informed policy planning for the crafts area.

Looking at professional craft artists and what is already known about them, we found that several surveys have been conducted in recent years. A Lou Harris survey in 1974 of a nationally representative sample of about 3,000 adults found that 39 percent currently engage in "woodworking, weaving, pottery, ceramics, or other crafts" and another 18 percent would like to do so, if they had the time. However, this survey did not distinguish professional craft artists from those active in crafts solely on a leisure basis and, in any case, is too small to provide reliable information about the characteristics of craftpersons.

In 1975, the American Crafts Council, one of the oldest and largest craft organizations with over 20,000 U.S. members, obtained Endowment support to survey a sample of its membership. The survey, which had about a one-third response rate, revealed a number of interesting things. Almost half the respondents made less than $1,000 a year from their crafts, while 8 percent made over $15,000. A third had been producing crafts for over 10 years, while another third had been in craft work for less than 5 years. About 40 percent claimed craft production as their major occupation; teachers were the next largest group at 25 percent.

Marietta College in Ohio recently began a directory of craft artists and craft organizations, also with support from the Endowment. Marietta originally sent a brief questionnaire to the membership lists of almost 1,000 organizations. The first edition of

Constance Citro is Associate Director, Policy Studies Division, Mathematica Policy Research, Inc., Washington, D.C.

the Marietta College Crafts Directory USA, published in March 1976, lists nearly 5,000 persons who returned questionnaires. Since then, over 50,000 questionnaires have been returned from craft artists originally queried plus new names. However, the Marietta list is not the product of a scientific survey of a defined population, and it is doubtful that the persons included can be regarded as representing all professional craft artists in America. Moreover, the Marietta questionnaire asked for only a limited amount of information.

A few other surveys have been conducted recently but are limited in usefulness because they focus on small subgroups of craft artists or have very low response rates. Finally, it is important to note that the United States Decennial Census and other large-scale census surveys are not a prime source of information regarding professional craftpersons. The occupational codes used by the Bureau of the Census identify only a few categories of craftpersons in the sense of those who make objects by hand. The Bureau's broad category of "craftsmen, operatives, and kindred workers," employed in the 1970 census, uses the term in the sense of the craft unions and includes persons working at particular trades in industrial settings.

Despite the absence to date of a comprehensive survey of American craftpersons, there are bits and pieces of data that permit a rough estimate of the number of professional craft artists, together with their distribution by place of residence and type of craft. A key source for developing these estimates is the ACC's directory, Contemporary Crafts Market Place. The 1975 edition lists 251 national, regional, and state craft organizations that have at least ten members, and indicates the number of members in the organization, the date founded, and other information.

Analyzing the geographic distribution of the ACC-listed organizations by the nine Census divisions turned up some interesting phenomena. The Pacific Division has the most craft organizations listed, followed by the New England and Middle Atlantic states. However, the distribution of members does not follow precisely the distribution of the organizations themselves. Thus, New England, with less than 15 percent of the listed organizations, has almost 35 percent of the members; while the Pacific division, with 20 percent of the listed organizations, has only 11 percent of the members. To put it another way, New England has a lot of very large organizations, with an average membership of 458 craftpersons, while the average membership of craft organizations in the Pacific is only 103.

The membership represented by all the organizations in ACC's 1975 directory totals 96,200 craftpersons. This figure is just the starting point, however, as the ACC publication includes only a fraction of craft organizations in the U.S. and therefore only a fraction of their members.

We engaged in an intensive effort to determine the total number of craft organizations in the U.S., to use in building an estimate of craftpersons. Through cross-checking lists of organizations, principally from the Marietta College Directory plus other sources, we arrived at a total number of almost 1,700 craft organizations in the U.S. as of mid-1976. Our master list shows a concentration in the South, but otherwise the organizations are fairly evenly spread across the country.

Before we could estimate numbers of craftpersons based on our estimate of their organizations, we felt we had to address the issue of overlap in organizational affiliation. In other words, we wanted to find out if craft artists tend to join just one organization or to have multiple organization memberships. To get a handle on this question, we obtained membership lists from the American Crafts Council and from 22 other organizations listed in the ACC directory representing different media and areas of the country. We also obtained lists from four craft fairs and exhibitions to see whether the people exhibiting at these events also belong to organizations.

We checked each of the 26 lists against the ACC list for duplication and found a fairly wide range in joining patterns. Less than one percent of the National Wood Carvers Association members belong to the ACC, while over 61 percent of the members of the Society of North American Goldsmiths do. Geographically, over 40 percent of members of Southern organizations belong to the ACC, while less than 4 percent of New England organization members do. Overall, about 10 to 13 percent of craftpersons appear to belong to both a state or local organization and the ACC. A fairly high percentage of craft artists exhibiting at fairs also appear to belong to the ACC (about 40 percent of the four fairs we examined). With more time and resources, we could have explored even more fully the questions of multiple memberships and of craftpersons exhibiting at fairs who are not organization members, but we felt we had learned enough to proceed with our estimates.

We constructed three estimates of the total number of professional craft artists in America using the information we had gathered. Each of the estimates took organizational overlap into account. The largest (and simplest) estimate was based on the average membership of ACC-listed organizations nationwide, applied to our total list of organizations, ignoring differences across geographic areas of the country. This estimate amounted to 335,000 professional craftpersons. Another estimate, totalling 325,000 craftpersons, was based on estimates for each geographic division aggregated to the national level. As I noted before, average organization size varies considerably by division, hence, the different estimate. The third estimate was built up, like the second, from area-specific estimates, and additionally took account of the high proportion of very large organizations with membership of over 500 in the ACC directory, almost 9 percent of the total. On the assumption that ACC tries to include the most prominent organizations, it seemed reasonable to presume that almost all of the large organizations were already listed and that the 1,400-odd organizations we added to the ACC list would mostly be smaller than 500 members. The estimate constructed on this basis, not surprisingly, is the smallest, coming to under 250,000 craftpersons.

Of course, not all members of craft organizations are professional craft artists. Excluding these persons would decrease our estimates. On the other hand, none of our estimates accounts for professional craftpersons who do not belong to organizations. The high percentage of craft artists exhibiting at fairs who also belong to the ACC reassures us somewhat on this point. However, it is undeniably true that not all professional craftpersons are joiners. This may be particularly true of persons working in ethnic craft traditions, such as the Amish, American Indians, and other groups.

One final note regarding what we were able to learn about craftpersons during the planning study concerns their media. Here, the available data were exceedingly unsatisfactory, and our estimates are merely suggestive at best. Working with the scanty information we had (including replies to ACC's membership survey and organization names, which frequently indicate media), we guessed that the

largest concentrations of craft artists are in ceramics, stitchery, weaving, and wood and metal working. There are also indications that ceramists are concentrated in the South, stitchers are fairly evenly divided throughout the country but with a concentration in the West, and woodworkers are strong in the North Central region. However, these estimates are highly speculative and not much reliance should be placed on them.

This research into what is already known about craftpersons and their organizations occupied a large part of our planning study effort. The remainder of our work focused on recommendations for a survey strategy for the Endowment. We recommended, basically, that each component of the crafts arena be approached as a separate problem from the viewpoint of designing the most effective survey.

Because of the strong interest in professional craft artists that gave focus to the planning study, we recommended that the Endowment concentrate its efforts on surveys of these persons. However, we did not recommend that the Endowment go after individual craft artists first. Rather, we strongly suggested that the Endowment initially survey craft organizations. Our estimate of about 250,000 to 350,000 professional craftpersons represents less than one-half of one percent of all working-age Americans. It would be prohibitively expensive to survey this group through traditional house-to-house methods. The only practical means of reaching craft artists appears to be through organizations or similar sources of mailing lists, such as persons exhibiting at craft fairs, craft shops' list of suppliers, subscribers to craft magazines, and so on.

Efforts such as the Marietta College Directory make it possible to assemble virtually a complete list of craft organizations within a fairly short time. Putting together lists of craft shops or other potential sources of craftpersons' names would be a much more time-consuming and difficult proposition. Rather than selecting a sample of craftpersons based on each craft organization's list, we recommended that the Endowment actually survey the organizations. We learned some things about some organizations during our planning study, but there is still much to learn, about their finances, how they are staffed, their salience to their members, and the extent and variety of their activities and services. Our knowledge of the crafts world will be expanded by a survey of the organizations that craftpersons have formed, particularly if we try to determine the role these organizations play in helping (or not helping) craftpersons to develop their skills and economic potential.

Conducting a survey of organizations first also has the great advantage of making possible a more cost-effective survey of individual craftpersons later on. Rather than drawing a sample of craftpersons from the membership lists of all organizations--thereby incurring the cost of checking lists for duplications--it is more sensible to simply request the membership lists of a sample of organizations. However, only if the organizations themselves are surveyed can the Endowment ensure, through a stratification procedure, that the sample of organizations selected is representative of important characteristics of craftpersons such as their media.

We realize that there are strong criticisms that can be made of our basic recommendation to use organization membership lists as the source of the craftpersons survey. Although we gained evidence that craft artists, like other groups in America, gravitate naturally toward joining associations of like-minded persons, we cannot assume that this is true of all craftpersons, particularly those working in ethnic traditions. Admittedly, our recommended strategy of starting with craft organizations and their membership weighed heavily the dollars and cents side of the equation. The Endowment is in no position to do a house-to-house canvass of the entire American population, but must begin by using its limited resources to reach the more readily available groups. The danger, of course, is that the Endowment will take the interests and needs of the persons replying to the organization-based survey as representing every type of craft artist in the U.S. I can only say that we ourselves and the Endowment are very much aware of the danger. Indeed, it is our recommendation that the Endowment, having surveyed craft organizations and a sample of their members, go after other groups of craft artists and institutions contributing to crafts production, with the expectation that experience gained from the earlier surveys will help improve the design and procedures of subsequent surveys.

MPR is now embarked on the initial survey of organizations, which is actually a census rather than a survey, as we are attempting to reach all known organizations. We are designing our procedures to try to get the highest possible response rate, so that the design developed subsequently to select membership lists for a survey of craftpersons is not biased. We expect our final report to be delivered before June of 1978.

A Pilot Study of the Training and Career Experiences of Symphony Orchestra Musicians

Donald J. Shetler

The primary objective of this study was to develop and pilot a research design aimed at identifying factors associated with the education and training and the resulting career patterns of symphony orchestra musicians. In particular, the study sought to develop data gathering instruments and techniques permitting a detailed analysis of educational and career influences. The instrument developed for this purpose was evaluated through administration to six sympohony orchestras in the United States. The orchestras were chosen to include representatives of the whole spectrum of orchestra types. While suitable for test purposes, the six do not constitute a stratified sample intended to be representative of all symphony orchestra musicians.

The research team included Professor Donald Shetler, Chairman of the Music Education Department of the Eastman School of Music; Professor Raymond Murphy, Chairman of the Department of Sociology, University of Rochester; Professor Thomas Smith of the Sociology Department; Quentin Marty, Graduate Research Fellow; and Benjamin Dunham of the American Symphony Orchestra League, a cooperative agency.

The project consisted of three phases: The project team first developed a model of a hypothetical orchestra player. In developing this model we sought to trace career development from the influence of parents and early musical experiences, to post-secondary training, career entry, and satisfaction and success in the role of orchestral performer.

This model provided the background against which we then developed and piloted a self-administered questionnaire intended to gather information in each of these phases of career development. The questionnaire is quite detailed and includes, for example questions relating to critical events, authority relationships in the home, occurence of influences to choose a career in music and the level of active participation in music-making among family members. Post-secondary musical training is examined in detail including music and non-music courses taken and the perceived relationship between training and later advancement and job satisfaction. Career entry through audition and sponsorship is also examined, as are the influences of a variety of factors, including level of orchestra and whether conservatory or liberal arts trained, on later job satisfaction.

In piloting the questionnaire, six symphony orchestras were chosen to represent the six categories of symphony identified by the American Symphony Orchestra League. These included Cleveland and Atlanta (Major), the Oregon Symphony (Regional), Fort Wayne (Metropolitan), Pasadena (Urban) and Denver Community Arts (Community). In addition, we identified four professional training institutions, each representative of one of the four types of schools which make up the constituency of the National Association of Schools of Music, the accrediting agency for professional schools of music. These schools included a state supported university professional school of music (Indiana University School of Music), a liberal arts college affiliated conservatory of music (Oberlin College Conservatory), an independent conservatory of music (Manhattan School of Music), and a privately endowed university school of music (Eastman School of Music).

Two hundred alumni of the four schools were selected for participation in this study. 10 each from classes of 1950, '55, '60, '65, and '70, with 140 responding, Of the 140 responding, only 66 were playing in orchestras. These responses, coupled with our 266 responses from the six orchestras, meant that 332 orchestral musicians were included in the total sample. Information regarding the analysis of this sample is available on request as is the survey instrument. Below we identify selected findings from our pilot study.

A. Family Background and Early Educational Experiences
   1. Long before young instrumentalists enter college, their career direction is remarkably focused. The importance of music in the home and parents' and teachers' encouragement is high. Career orchestra players have earned income from musical activities and their expectations for performing careers are surprisingly well anticipated.
   2. Mothers' encouragement is higher than

Donald Shetler is Chairman, Department of Music Education, Eastman School of Music, University of Rochester, Rochester, N. Y.

fathers' in general. Fathers are considerably less encouraging. A child's choice of a career as a professional musician, with the anticipated specialization and educational expense factors involved, appears to be regarded with some apprehension by the chief wage earner in the family.

3. It may be significant to note that the demographic data indicate that none of the fathers of our respondents are full-time orchestra musicians.

B. Post-secondary Training Content and Experiences

The section on training during post-secondary years prior to entering the profession was of special interest to the Endowment. Of most interest are the responses of our sample to the series of questions related to the nature and content of post-secondary or college level training and education and its perceived relevance to an orchestral career.

Some findings from the pilot test are:

1. Slightly more conservatory (or professional music school) trained players studied with professional musicians than did liberal arts trained players (81% to 73%).
2. Conservatory trained players, although a bit less likely to "play for pay" during freshman and sophomore years, were more likely to earn income for performing during the junior and senior years.
3. About 24% of both groups reported attending rehearsals of professional orchestras while in school.
4. 36% of our sample thought that a competitive atmosphere in school was "very important." About 6% more conservatory trained players than liberal arts trained persons regard this feature as important.

As you know, curricula in professional schools and in liberal arts colleges vary in many ways. For example, music majors in a liberal arts college may be required to take as much as 60% to 70% of the total degree program in non-music related courses, while the conservatory or professional school student may taken less than 20% in this area.

We asked our players to indicate the kinds of music and non-music courses they took, how many years the courses were taken, and, finally, which were "most useful for a successful career as an orchestral musician," or "least valuable or relevant for success as an orchestral player." This is a particularly tricky issue to deal with in research of this type.

More liberal arts educated players took courses in composition, conducting, and music education than their conservatory trained colleagues, and more of those trained in professional schools studied chamber music and piano.

More than half of the professional school trained players took courses in English, foreign language, science, and social studies, although the requirements for the BM degree are minimal and often elective in this curricular area.

Finally, we asked our sample of players to write in those college courses they regarded as most useful and least useful for success as orchestral players. As might be expected, for the most part music courses were listed as most useful, and non-music courses least useful or relevant.

C. Getting a Job: Audition and Sponsorship

Our data indicate that the conservatory trained musician seemed less likely than the liberal arts trained musician to regard sponsorship as important in getting orchestral jobs. We found that A level players, both conservatory and liberal arts trained, are more likely to regard performance as more important than sponsorship than are B and C level musicians, although the majority of our respondents at all levels see performance as more crucial than sponsorship.

Since audition procedures for A and B orchestras are more stringent, the perceptions of A and B musicians are likely to reflect the relative importance of sponsorship versus performance competency in seeking an A or B orchestral position.

There are too many results from this preliminary work to summarize succinctly, but there is a general pattern to them that is of interest. If a musician is successful in one respect, it appears that he may be unsuccessful in another. Developing intrinsic satisfaction as an orchestral player--rewards derived from matters like repertoire--is best predicted by employment outside the top echelon of orchestras. Two dimensions of success are thus negatively related to one another. And these are not the only two. The level of a musician's orchestral employment, for example, increases his earnings but may decrease his commitment to an orchestral career. In fact, intrinsic satisfactions were at their highest levels among musicians who report the lowest levels of extrinsic satisfactions. These "contradictions" in the lives of particular musicians appear not as faults in their career development, but, in this pilot study, as descriptions of the typical orchestral musician.

Recommendations for Futher Research

We are aware of the very small sample used for the pilot study, and that the ASOL classification system, based on annual budget, does not serve well as an indicator of the variance among types of symphony orchestras in the U.S. Likewise, our other population, that of post-secondary training institutions, should be further represented by adjusting sample size and representation to include several liberal arts college music departments. A "pilot" study should, of course, identify sampling and methodology problems one might expect to modify prior to any major research project in the future.

While our data gathering instrument appears to be well-suited to the task for which it was designed, we recommend follow-up interviews for certain areas of career preparation and development. This would provide additional valuable information to support those data supplied by completed questionnaires.

Our study, as a pilot project, was carried out over a short time period and was funded at a level that limited our use of certain analytical techniques. We recommend the use of case-history and longitudinal studies. For example, the stability of commitment to the job of orchestral playing might be analyzed by identifying young performers while still in training, or very early in their careers, in the same manner as Strong and Campbell followed the occupational history of their subjects over a thirty-year period.[1] We have already been assured that should such a venture be initiated, we could expect the hearty support of the major accrediting agency for professional schools of music.

Our pilot study does identify the chief components of a college level program for training the potential orchestral performers. Many of our respondents pointed our certain failings of that program to meet their needs as orchestral players. It might be noted in this respect that, during the early 1970's, a major funded study, the Contemporary Music Project, initiated a national program to reform the fundamental components of music study at the college level.[2] A chief objective was to produce a performer who could play more than a single instrument well, could perform music of many styles, periods, and cultures, and had the ability to verbalize about those musics to audiences. The effort was controversial to say the least. A number of colleges and some professional music schools adopted the curriculum revisions designed to accomplish these objectives. It would be worth our time to identify certain graduates of those schools now playing in orchestras, and to explore the influences, if any, that the "new" curriculum had on attitudes and opinions about orchestral playing and music in general. If this project has any impact on the issue of training the career instrumentalist, this could be its most important contribution.

Another issue that needs to be addressed is the specific association we had with the American Symphony Orchestra League. We need to explore the possible influence of an established agency's image stereotype as an influence on orchestra response rates. For example, we might request assistance from the musician's own association, the International Conference of Symphony Orchestra Musicians, a sub-agency of the American Federation of Musicians, in obtaining increased cooperation from the players.

We also see the value of studying in some depth the career history and training patterns of other performers, such as actors, dancers, and opera company singers, in order to obtain data that might be compared to those from instrumentalists.

Our data gathering and analysis procedures could be modified for such research. It appears that encouragement to enter a full-time career and a significant level of financial support are crucial to career progress at certain stages of the young artist's development; also, that internal satisfaction items such as status, financial remuneration, role definition, and opportunity to gain outside income may be highly significant in other performance careers as well. Analysis of those satisfaction and commitment considerations we identified and treated in our path models is feasible using data supplied by other performers.

Our data clearly indicate that the employment and career development of the successful orchestra player do not relate to training alone. Many variables, some identified for the first time in this study, need to be considered.

Even this small sample, unrepresentative of all U.S. orchestras in many respects, provided evidence that musicians highly "successful" in the major or "A" level orchestras get their training in a variety of institutions, certainly not limited to a few independent conservatories located in major music centers.

Our pilot study provides a framework, a data gathering process, and analytic techniques that can be used to examine other careers in the performing arts; and, in our view, the need to continue research is clear. Although our findings are not conclusive, evidence already in hand suggests the potential for removing certain myths and stereotypes surrounding the career development of professional orchestral musicians.

Footnotes

1 Strong, E. K., Jr. and Campbell, D. P., Manual for Strong Vocational Interest Blanks. Stanford, California: Stanford University Press, 1966.

2 "The Education of the Performing Musician," College Music Symposium, Vol. 13, Fall 1973.

Estimating the Need for Musical and Administrative Leadership of American Orchestras

Benjamin Fogel

Objectives

The objectives of the Exxon/Arts Endowment Conductors Program has been to identify young conductors with the potential to serve as music directors, and to provide them with the experience that would equip them to do so. This has been done by placing such conductors in three-year internships with major orchestras, where they have the opportunity, under the tutelage of a distinguished music director, to acquire a breadth of experience that would enable them to learn the skills required of a music director.

As the Exxon/Arts Endowment Conductors Program approached completion of its first three-year round of operations, the sponsors decided that guidance for future funding decisions was required. This study was undertaken to estimate American orchestras' future needs for musical and administrative leadership, and to assess the appropriateness of the present program as a means of meeting these needs. It was also thought useful to identify ways to improve the effectiveness of the program. Further, it was apparent that the execution of this project would require the systematic compilation of a body of data on American orchestras that is neither currently available nor readily accessible. Thus, an additional objective was to provide the National Endowment for the Arts with a data base having broader usefulness in the future.

Approach

Research was implemented in several distinct but related stages. In the first stage, orchestras were surveyed by means of a mail questionnaire that elicited information regarding turnover, the hiring process, and the characteristics of persons hired. This information was used to make a preliminary estimate of the need for musical and administrative leadership.

The second stage of the project was devoted to securing additional information concerning orchestra operations, through interviews with a selected group of orchestras, and statistical data compiled by the American Symphony Orchestra League. This information was used in the third stage to refine the preliminary estimates of leadership needs.

The fourth stage of the project consisted of an assessment of the management of the program, on the basis of interviews with Affiliate Artists as well as young conductors and orchestras participating in the program.

Need for Musical Leadership

The factors affecting the need for musical leadership are numerous; some are predictable, while many are unpredictable. For the 194 orchestras in the top four classifications (as well as for others), a music director is a necessity. If he leaves, he must be replaced. About 55 percent do leave or have left over the past five years. Reasons for termination of the relationship include retirement, among other things. Most frequently, the reason for resignation is to accept another position. Conductors are as mobile as they are talented and ambitious. Since the rate at which they vacate positions is known, the number and percentage of positions that will become vacant can be projected, and this has been done.

With associate and assistant conductors (particularly the latter), the need is less predictable, and projections can be made with far less assurance. Over the last five years, some orchestras have added associate or assistant conductors, while others appear to have eliminated such positions. Movement in and out of these positions has occurred at a pace that could not be specifically documented.

Whether an orchestra has assistant and associate conductor positions is subject to a number of factors. Some music directors want assistants to share the conducting load as well as other artistic or administrative details. Others may not want to share responsibilities. Hiring an assistant depends on approval by the board, which in turn may be dependent on the availability of funds for additional positions. Filling or creating an assistant position may thus depend on a special grant or gift.

Only when the number of performances and services substantially exceeds the time available to the music director can an assistant position be ensured. While it has been possible to determine the number of performances that make an additional conductor a necessity, the number of concerts that an orchestra may give over the next five years could not be determined. If no increase in the current level of activity is assumed, however, the number of associate and assis-

Benjamin Fogel, Senior Associate, Cresap, McCormick and Paget, Inc., New York, N. Y.

tant conductor positions that would have to be filled can be projected, subject to caution for the reasons cited.

Choice of Musical Leadership

As with the need for musical leadership, the choice of conductors is affected by a number of factors stemming from the special characteristics of the world of symphony orchestras. The limitations placed on choice tend to segment and diminish the size of the market.

The process of choosing a music director differs substantially between larger and smaller orchestras. At the level of the urban and metropolitan orchestras, the music director is usually selected by the board. Among larger orchestras, on the other hand, the manager plays a larger role in the selection of a music director, even though board members, who give final approval, may be more knowledgeable and sophisticated than their counterparts on the boards of smaller orchestras. For associate and assistant conductor positions, the choice is made quite differently: here, the music director exercises an almost exclusive prerogative.

There are only a limited number of musicians from among whom choices are made. For music directors of smaller orchestras (particularly urban and metropolitan orchestras), the choice is limited by the knowledge and perspective of individual board members. For the largest of the major orchestras, choices are limited to those conductors with the greatest prestige and international reputations; lesser renown is felt to be unacceptable. However, for major orchestras below the top group, the choice may be limited by what they can afford. Probably most of the major and regional orchestras are limited by the amount of time available from individual conductors. Since these conductors may already hold at least one post, they will have a limited amount of time available to devote to a second post.

Musical directors seem to choose associate and assistant conductors from among the small number of younger conductors whom they have chanced to encounter, or based on recommendations from colleagues. The candidate selected is almost invariably one whose personality suits that of the music director. Auditions for these positions outside of the Exxon/Arts Endowment Program are seldom held.

A significant number of orchestras, principally the larger ones, tend to promote musicians in the orchestra or younger assistant conductors to other conducting positions. Consequently, the actual number of positions to be filled (that is, the size of the market) is effectively reduced.

Estimate of Need

Our estimate of the need for musical leadership is based on two principal assumptions: (1) that the number of orchestras in all categories will remain the same, and (2) that the rate at which music director positions are vacated will remain constant over the next five years. The initial estimate, then, is for replacement demand: that is, the number of vacated positions that will have to be filled during the coming period. This is an unadjusted total, and was derived by establishing a percentage rate of turnover and applying this figure to the total number of orchestras in each of the four categories. Table 1 summarizes the projections of need for musical leadership.

If adjustments are made to reflect the number of vacancies that may be filled by promotion from orchestra staff, thus more accurately defining the actual market, the following reductions should be made from the total demand shown for conductors:

--Major orchestras should be reduced by a total of 9 positions.

--Regional orchestras should be reduced by a total of 8 positions.

--Metropolitan orchestras should be reduced by a total of 13 positions.

--Urban orchestras should be reduced by a total of 6 positions.

The utility of these projections would be greater if it were possible to project the growth demand; that is, the positions that would be created through increased orchestra activity. As indicated earlier, however, reliable data on this matter are not available. Nevertheless, it has been possible to determine that, among all the measurable factors which may affect the need for an additional conductor, the number of performances by the orchestra shows the highest correlation. On this basis, a predictive model has been developed which could incorporate the projection of growth demand, should sufficient data become available.

Assessment of the Program

Young conductors in the Exxon/Arts Endowment Program are agreed that they are gaining unique and valuable experience, and the managers of the orchestras involved also agree about the value of the program. This testimony is confirmed by the success of conductors who have completed the program's three-year internship. Although not placed by the program, six of the eight young conductors who entered the program during its first two years are now serving as music directors of other orchestras. One of these six is now the music director of a major symphony orchestra, three are music directors of metropolitan orchestras, one is the principal conductor of an opera orchestra, and the sixth has been promoted to associate conductor of the regional orchestra in which he served as an assistant.

Despite some difficulties at the outset, management of the program has improved steadily and is now functioning effectively. Several problems nevertheless remain to be resolved. Questions have been raised by participants regarding the "match" between orchestras and young conductors. The artistic and administrative opportunities offered by orchestras differ widely; thus, the question is raised whether the orchestra in which a young conductor has been placed can provide the opportunities most needed by that conductor.

This problem is closely related to the role played by the music director of the host orchestra. There appears to be significant variation in the amount of tutelage provided. The failure of a music director to provide the tutelage expected by the program could be a source of significant weakness. Thus, the ability of Affiliate Artists, as the administrator of the program, to monitor the role played by the music director is of crucial importance. There is some evidence that access to music directors has been limited, and that major guidance for the young conductor may in fact come from the orchestra manager.

After four years of operation, the program has shown significant results. Sixteen young conductors have had, or are gaining, experience with thirteen different orchestras. The process of selecting these conductors has been carried out systematically, with opportunities for testing and comparison before the final choice was made. The conductors placed have had a greater opportunity to gain a wide range of experience than they might otherwise have enjoyed. Moreover, the skills gained have prepared them to function as resident conductors who can contribute to the

development of American orchestras in addition to advancing their personal careers.

Further, the orchestras involved have had a broader choice of talent than would have been likely under the limitations imposed by the tradition of "cronyism." Finally, several orchestras with a need for an additional conductor have been enabled to meet that need, and thus aided in offering more performances than might otherwise have been possible.

Future of the Program

Through the opportunities that have been provided to young conductors, the skill with which the program has been organized and managed, and the successful placement of "graduates," the Exxon/Arts Endowment Conductors Program is making a unique contribution to the development of leadership for American symphony orchestras. Beyond question, it should continue to do so. The level at which it should continue, however, is subject to further consideration.

Since the program as now conceived presumes the participation only of major symphony orchestras, little if any program expansion appears to be indicated. There are 31 such orchestras, but the number of potential participants is substantially less. The five largest of the major orchestras are not available as participants, either because their structure does not provide the requisite opportunity for young conductors (as is the case with the New York, Boston, and Philadelphia orchestras), or because they have developed their own source of assistant conductors (as the Chicago and Cleveland orchestras have done). If the projection of vacancies in music director positions is reliable, then at least three additional orchestras in any given year would be in the hands of guest conductors or of a music director who, with a new orchestra and new duties, would be unlikely to take on the additional job of mentorship for a young conductor.

Of the remaining 22 or 23 major symphony orchestras, several probably would be inappropriate placements for the program, or might for other reasons be unwilling to participate. Thus, there are probably less than 20 major orchestras available for participation in the program. (The actual number available has been increased by the inclusion of two opera orchestras.) The total number currently participating is 10. Thus, two questions arise:

- To what extent should the program attempt to saturate or preempt the market?
- Are there enough young conductors with sufficient talent to meet the objectives and standards of the program?

While this study is in no position to supply answers to these questions, the sponsors of the program must be prepared to do so. On the basis of the considerations discussed above, it would appear that the present level of support could be increased by no more than one or two positions. It should also be recognized that an objective analysis of these factors might indicate a reduction in the level of support.

A possible modification of the program might be considered that would affect both program effectiveness and the level of support. This modification is based on a question raised by several interviewees: Can the young conductor learn best under tutelage with a major orchestra or through conducting his own orchestra? If the answer is that both are desirable, it has been suggested that the internship might be split between the two; for example, one year with a major orchestra might be followed by two years as the head of a metropolitan orchestra. In developing this kind of modification, it will be necessary to determine the time required for gaining effective experience in each placement. The orchestras best able to provide effective experience will also have to be determined. If the present number of major orchestras were found to be effective, the addition of conducting experience in metropolitan orchestras would substantially increase the level of support required for the program. On the other hand, if the number of major orchestras effectively participating were to be reduced, the metropolitan conducting experience could probably be incorporated with little or no additional financing. In any event, whatever the level at which this program modification might be supported, it would impose greater demands on administrative skills and on the funds required to support administration. It is therefore proposed that the sponsors of the program explore the implications of this suggested modification.

Importance of Administrative Leadership

With respect to administrative leadership, the survey found that 108 orchestras had full-time general managers. 64 percent of these orchestras had made at least one change in general manager over the past five years, thus creating a vacancy in the position. The percentage was very similar for each category of orchestra. Projection of these percentages over the next five years indicates that all orchestras with general managers will be filling that position 12 times, or at a rate of 25 vacancies annually. For major orchestras, at least 19 vacancies are expected to appear in the next five years, at the rate of 4 each year.

The survey also provided evidence that the number of administrative positions in orchestras below the level of general manager has been increasing at a rapid rate. Of the orchestras responding, 48 percent reported additions to their administrative staffs over the past five years, and indicated that further additions are planned. The positions most frequently added are development director and assistant manager. Managers appointed to fill vacancies are most often brought from outside the orchestra, rather than promoted from the orchestra's staff.

The growth of administrative staff is indicative of the growing importance of administrative leadership, despite the prerogatives of the music director and the ultimate authority of the board. Moreover, the manager's influence is being felt in musical or artistic decisions. The economic viability of the orchestra, for which the manager is responsible, must be taken into consideration in making artistic decisions regarding guest conductors, soloists, or the preparation of new or complex repertoire. The mix of concert performances, local or tour, subscription or pops, is affected by their relative costs of preparation and their expected return. In the absence of the music director (which is increasingly common among the international stars who lead the larger orchestras), the manager can exercise still greater authority, having a major voice even in the selection of a music director, as in the selection of an Exxon/Arts Endowment conductor.

The economic stability of an orchestra requires not only competent but professional management. Earned income must be maximized and, since this is never sufficient to maintain the orchestra, contributed income must be sought increasingly. Tasks involving promotion, marketing, sales, and financial control have become more demanding. Development directors are now needed as full-time positions. The manager must be able to lead, plan, and supervise these activities, and he is increasingly dependent on well-trained staff for their execution.

Interviews in the course of this study have disclosed a very real concern among managers regarding the source of well-trained administrators in the future. They, more than any others, are aware that the availability of well-trained staff is crucial to the future of American symphony orchestras. There now appear to be multiplicity of arts administration courses offered in several universities, as well as a number of separate (usually small) organizations addressing some part of this problem. By and large, managers have some skepticism regarding the effectiveness of the training that is now available in these academic programs. Several suggest that regular master's degrees in business administration might be appropriate. However, comprehensive knowledge of the training that is available, its effectiveness, and what kinds of training might be most appropriate is lacking. This suggests that the National Endowment for the Arts and the Exxon Foundation might well explore the potential in this situation. In the future, a program for administrative or management interns might well be as important to American orchestras as the present program for conductors.

Table 1

ESTIMATED NEED FOR MUSICAL LEADERSHIP, BY TYPE OF ORCHESTRA

	Unadjusted Projection*					
	Five-Year Total			Annual Average		
Type of Orchestra	Music Directors	Associates And Assistants	All Positions	Music Directors	Associates And Assistants	All Positions
Major	18	37	55	4	7	11
Regional	18	20	38	4	4	8
Metropolitan	61	42	103	12	8	20
Urban	25	18	43	5	3	8
TOTAL	122	117	239	25	22	47

*To adjust for promotion from orchestra staff, these totals should be reduced by:

Majors--9 positions
Regionals--8 positions
Metropolitans--13 positions
Urbans--6 positions

Using Census Data to Study Characteristics of American Artists

John C. Beresford and Diana Ellis

DUALabs has conducted work under contract to The National Endowment for the Arts to produce studies based on the 1970 census. Titles of the reports are:

Where Artists Live: 1970
Minorities and Women in the Arts
Migration Patterns of U.S. Artists, 1965-1970
Employment Patterns of U.S. Artists, 1970
Living Patterns of U.S. Artists, 1970
Household & Family Characteristics of Artists, 1970

This paper is based on some of that work.

Collecting and Coding Census Results

The 1970 Census of the United States included a group of questions which permitted people to write out their current or most recent occupation. The written responses described the "kind of work" a person did, the "most important activities" in this work, and the "job title." Additional responses identified the name of the employer and kind of business or industry. About 16 million men and women 16 years old and over answered these questions. They comprised a random sample of 20 percent of the 80 million Americans in the experienced civilian labor force.

Replies were examined by Census Bureau coders and classified into 441 specific occupation categories. Twelve of these occupations were classified into a broad group called "writers, artists, and entertainers." From this group we selected for study actors, dancers, designers, musicians and composers, painters and sculptors, photographers, radio and television announcers, and a residual category called "other writers, artists and entertainers." Also included in this study are the occupations of architects and university teachers of art, drama, and music. (Not included in this study, but included in the broad census group, are athletes, editors and reporters, and "public relations men and publicity writers.") Using the definition of this study, artists in the experienced civilian labor force in 1970 numbered 603,000 (cf. Table 1).

Using Data for the Nation from Printed Census Reports

Table 2 compares the number of artists as defined by this study with the number of persons in other occupation categories. These numbers, with detail on sex, race, age, employment status, salary, education, weeks worked the year before the census, and other characteristics are available in an 800-page report from the Census Bureau, titled Occupational Characteristics.[1] With that report and a calculator, a person responsible for policy can make a substantial number of comparisons of artists with other occupational groups for the United States in 1970. For example, a person concerned with equal employment opportunity in the arts could examine the proportion of employed for each occupation group and the proportion of females employed for each occupation, as shown in Table 2. The percentage of employed female artists is lower then the percentage of employed females in other professional occupations, but so is the percentage of total artists employed lower than total employed in other occupations.

Using Data from Public Use Samples

Certain policy questions may require more data than are available in printed reports. For example, to understand the significance of variables associated with an occupation, e.g., unemployment and earnings, one may wish to examine or remove the effects of factors such as sex, age, family status, race, or previous employment history. This requires tabulation that can be obtained from the 1970 Census Public Use Samples.[2]

There are six samples of the occupied housing units and the persons in them. Each contains one percent of the population of the nation in 1970. The complete samples are large enough to make their repeated use expensive, complicated, and time consuming. Therefore, an extract was prepared containing all the data for artists and persons in households with artists. Another extract of about the same size was prepared for persons in a selected set of non-artist occupations to be used for comparisons. These relatively manageable extract files are available at the National Endowment and may be used to prepare tabulations from the 1970 Census at relatively low cost. Using these samples, it is possible to look at events which occur infrequently and to describe their characteristics: black authors, self-employed painters with high earnings, and so on. As

John Beresford is President, Data Use and Access Laboratories, Arlington, Virginia. Diana Ellis is Writer Analyst, Data Use and Access Laboratories, Arlington, Virginia.

a simple example, the minority artist population can be described (see Table 3).

In our work for the National Endowment, we created the category of "established artists" (those artists 30 years old and over who were in the same occupation five years ago) to eliminate the effects on income of youth or inexperience in the occupation. We learned that median income for the racial minority established artist who worked 40 weeks or more was 84% of the median earnings of the established white artist (see Table 4). Comparable data have not been calculated for the rest of the population. However, in the total labor force, the median earnings in 1970 for minorities were about 74% that of whites. We conclude that one's race had some effect on how much money an artist could earn in 1970, but these effects varied according to the particular artist occupation. As indicated by Table 5, minority actors, university teachers, and photographers had greater difficulties in achieving earnings comparable to white people in their occupations than did radio/TV announcers or painters and sculptors.

There is also evidence from the census data that the sex of artists had an effect both on earnings and on becoming established in an artist occupation. Women made up 32% of all artists in our categories, but are 40% of the professional labor force and 37% of the total labor force. The proportion of women in the individual artist occupations varied considerably, however, as indicated by Table 6. In addition, the established female artists who worked 40 weeks or more in 1969 earned far less than men: $5,510 compared to $11,980 (see Table 7).

The public use samples are also being used to explore topics such as the family and household status of artists, the earnings of self-employed artists, and family income from other earners as a source of support for artists. There are many other possible topics which could be examined. For those interested in pursuing the matter, a review of the description and technical documentation of the 1970 Census Public Use Sample is recommended.

Researchers who require training to work with the data files on the computer can receive "hands-on" experience in a few days and can, thereafter, access the data via terminals in their own office. The training consists mainly of learning the basic characteristics differentiating the six versions of the sample, learning to use software that will handle hierarchically organized data files, and learning the particular terminal access techniques being employed by the Endowment. Those with their own computer facilities and software can acquire copies of the files on magnetic computer tape and make their own arrangements. The regular technical documentation from the Bureau of the Census for the Public Use Samples can be used, supplemented with a report prepared by DUALabs showing the number of cases by each occupational category in the files.

Using Data from Printed Reports for States and Metropolitan Areas

A third way to use data from the 1970 Census is to obtain already summarized numbers for artists in states or major metropolitan areas. To do this, it is necessary to work with the printed reports in what is called Volume 1, Chapter D, of the 1970 Census. They comprise a considerable bulk. If one were interested in doing something fairly simple, for example, showing the number of employed artists by state or metropolitan area, one could record the numbers on cards, sort the cards to rank the geographic areas, and produce a table, e.g., Table 8, the rank of each state or metropolitan area.

One could also gather data on the dispersion of artists' occupations across the United States according to their approximate numbers in metropolitan areas. One would find that New York and California have the highest concentrations of actors. (There is an anomalous number of actors and dancers in Nevada because of the show business activities associated with gambling.) Concentrations of radio and television announcers occur in the sparsely inhabited states. There are public policy implications in the distribution of these artists. The broadcasting industry is regulated; transmitter wattage is controlled, and local public service is required. Hence, announcers are geographically dispersed approximately as the general population: 34 of the 50 states each have one percent or more of all announcers. Only 15 of 50 states each have one percent or more of all actors.

A policy of licensing and technical restrictions dispersed the broadcasting plant in the U.S. and resulted in a dispersal of announcers. To make the plant pay, a series of devices for generating local income and network income evolved. There are, in these cases, examples of the impact of public policy on the dispersion of announcers and the impact of market forces (non-policy) on the concentration of actors.

In Finland, a policy of national and local government support for live theatre disperses actors throughout the nation. There are 33 professional theatre groups, one for each 172,000 persons. The equivalent figure in the U.S. would work out to about 1,200 professional theatre groups, but there are probably less than 200 resident companies with budgets over $200,000 in the U.S. By Finnish standards, we are short about 1,000 theatre groups.

Using the 1970 Census data to study residence of artists can be facilitated by use of the computer. The summarized data in the printed reports are already on the so-called "6th count" computer tapes available from the Census Bureau. Alternatively, needed data can be entered into the computer by hand. In either case, programs must be written before analyses can be made. If public policy pertaining to residence of artists is contemplated, one would probably want to consider how artists change their location in the absence of policy. Census data identify residence in 1965 as well as residence in 1970. From these two points a kind of abstract summary of long-run migration can be made.

No matter how this migration is analyzed in detail, it tends to follow the pattern of all migration in the U.S. Further, it represents only 8% of all artists. In short, migration alone has little to do with the regional distribution of artists in the U.S. A more detailed analysis from the Public Use Sample reveals that the growth in the number of artists in each region is mainly a result of new labor force entries (see Table 9).

Regional policy aimed at encouraging new entrants to the artist occupations would fit in with the natural increase trends in each region, as of 1970, and would not be offset, apparently, by interregional migration losses. However, the artist occupations are primarily urban oriented, and the major metropolitan areas of New York, Chicago, and Los Angeles definitely attract migrants. Between 21 and 31 percent of the artists in those metropolitan areas in 1970 were living elsewhere in 1965. We assume that migration into these artist markets and training centers has long been important and would be a potential problem for public policy related to migration or regional development of artists. The places that do the training for any occupation, or

provide the biggest market (or both) probably tend to keep the best and the most of those who enter their domain. If this is not desirable, then ways to encourage movement to the hinterlands would have to be devised.

As policy alternatives are identified which seem economically and socially feasible, you may consider whether census tabulations exist or could be created which would aid in deciding which alternatives to choose. DUALabs has already prepared reports dealing with many topics. These will be made available through the National Endowment. We would be pleased to advise you on any questions relating to availability of public statistical data pertaining to specific policy alternatives.

Footnotes

1 U.S. Bureau of the Census, Census of Population: 1970 Subject Reports, Final Report PC(2)-7A Occupational Characteristics.

Other reports with detailed information on artists and other occupational categories include:

U.S. Bureau of the Census, Census of Population: 1970 Subject Reports, Final Report PC(2)-6A Employment Status and Work Experience.

U.S. Bureau of the Census, Census of Population: 1970 Subject Reports, Final Report PC(2)-4A Family Composition.

U.S. Bureau of the Census, Census of Population: 1970 Subject Reports, Final Report PC(2)-4B Persons by Family Characteristics.

U.S. Bureau of the Census, Census of Population: 1970 Subject Reports, Final Report PC(2)-7F Occupations of Persons with Higher Earnings.

U.S. Bureau of the Census, Census of Population: 1970 Subject Reports, Final Report PC(2)-5B Educational Attainment.

U.S. Bureau of the Census, Census of Population: 1970 Subject Reports, Final Report (PC(2)-8B Earnings by Occupation and Education.

U.S. Bureau of the Census, Census of Population: 1970 Subject Reports, Final Report PC(2)-8A Sources and Structure of Family Income.

2 U.S. Bureau of the Census, Public Use Samples of Basic Research from the 1970 Census: Description and Technical Documentation, Washington, D. C., 1972.

Table 1

ARTISTS IN THE EXPERIENCED CIVILIAN LABOR FORCE, 16 YEARS OF AGE AND OVER

Census Writers, Artists, and Entertainers	798,000*
Category 1, Used in the Study	
Actors	14,000
Authors	26,000
Dancers	7,000
Designers	112,000
Musicians and Composers	97,000
Painters and Sculptors	107,000
Photographers	66,000
Radio and Television Announcers	22,000
Other Writers, Artists, and Entertainers	64,000
Category 2, Not Used in the Study	
Athletes	53,000
Editors and Reporters	153,000
Public Relations Men and Publicity Writers	76,000
Category 1, Total	515,000
Architects	57,000
Teachers of Art, Drama, and Music (college)	31,000
Total Artists Used in the Study	603,000

*Detail does not add to total because of rounding

Table 2

MAJOR PROFESSIONAL CATEGORIES WITH 250,000 OR MORE PERSONS, UNITED STATES, 1970 (NUMBERS IN THOUSANDS)

	Experienced Civilian Labor Force			Total Female Employed	% of Female Labor Force Employed
	Total	%Employed	%Female		
All Professionals	11,667	98.2	40.1	4,572	97.8
Teachers, except college	2,768	98.7	70.6	1,937	98.5
Engineers	1,266	97.4	1.7	20	95.2
Registered Nurses	967	98.4	94.4	899	98.5
Engineers & Science Technicians	843	97.3	11.0	88	94.6
Accountants	721	98.6	25.5	180	97.8
Artists Studied	603	95.4	26.5	150	93.8
Physicians, Dentist, & Related	541	99.7	8.3	44	97.8
Teachers, College & University (except Arts, Science & Music)	465	98.9	28.2	128	93.7

Table 3

PERSONS 16 YEARS OLD AND OVER IN ARTISTIC LABOR FORCE AND LABOR RESERVE, BY OCCUPATION AND RACE/ETHNICITY, U.S., 1970

Occupation	White	Black	Spanish-American	American Indian	Asian-American	Other
Architects	57,219	1,283	1,867	3[illegible]	1,613	201
Art-Drama-Music Teachers (University)	32,775	925	334	0	336	50
Actors	20,563	1,134	1,266	117	234	116
Authors	30,083	651	534	33	132	17
Dancers	9,406	914	798	49	389	133
Designers	119,596	2,882	5,409	201	2,302	249
Musicians and Composers	109,937	8,657	4,629	269	862	97
Painters and Sculptors	119,356	2,917	4,297	382	1,898	165
Photographers	71,230	2,585	2,928	118	1,141	84
Radio/TV Announcers	23,005	652	734	68	50	65
Other Artists/Entertainers (not elsewhere classified)	69,441	3,509	4,859	497	1,609	318
Total	662,611	26,109	27,655	1,768	10,566	1,495

Source: Data Use and Access Laboratories, "Tabulations of Artists and Persons in Comparative Occupations in the United States: 1970," Tables 2 and 3 (prepared for the National Endowment for the Arts, January 1977).

Table 4

MEDIAN INCOMES BY OCCUPATION AND RACE/ETHNICITY FOR ARTISTS AGE 30 AND OVER WHO WORKED 40 WEEKS OR MORE IN 1969 AND WERE IN THE SAME OCCUPATION IN 1965 AND 1970, UNITED STATES, 1970

Occupation	White	Black	Spanish-American	American Indian	Asian-American	All Minorities
Architects	$15,230	$11,970	$12,170	*	$13,670	$12,610
Art-Drama-Music Teachers (university)	12,490	9,020	10,000	*	*	9,680
Actors	12,550	9,020	*	*	*	9,520
Authors	10,930	10,500	10,520	*	*	10,250
Dancers	10,030	*	*	*	*	*
Designers	11,920	9,680	10,170	*	12,040	10,520
Musicians/Composers	6,520	5,200	6,850	*	8,520	6,200
Painters/Sculptors	10,260	9,670	9,990	14,000	10,210	10,130
Photographers	10,080	8,170	7,910	*	7,490	7,880
Radio/TV Announcers	10,660	13,520	6,520	*	*	11,520
All Artist Occupations	$11,030	$ 8,230	$ 9,050	$ 7,980	$10,660	$ 9,310

*Less than 100 established minorities, providing too few cases for a meaningful comparison. This data is included in median incomes for "All Minorities" and "All Artist Occupations."

Source: Data Use and Access Laboratories, "Tabulations of Artists and Persons in Comparative Occupations in the United States: 1970," Supplemental Tables T005-T008 and T020-T022 (prepared for the National Endowment for the Arts, January 1977, revised November 1977).

Table 5

EARNINGS GAP BETWEEN ESTABLISHED MINORITY AND NON-MINORITY ARTISTS IN EACH ARTIST OCCUPATION, U.S., 1969

Occupation*	Median Minority Earnings as a Percent of Median Non-Minority Earnings
Radio/TV Announcers	108%
Painters/Sculptors	99
Musicians/Composers	95
Authors	94
Designers	88
Architects	83
Photographers	78
University Teachers of Art-Music-Drama	77
Actors	76
All Artist Occupation	84%

* Dancers are excluded because of too few established minorities to provide a meaningful comparison (34 dancers). They are included in percentage of "All Artist Occupation."

Table 6

MALE-FEMALE COMPOSITION OF THE
ARTISTIC OCCUPATIONS, U.S., 1970

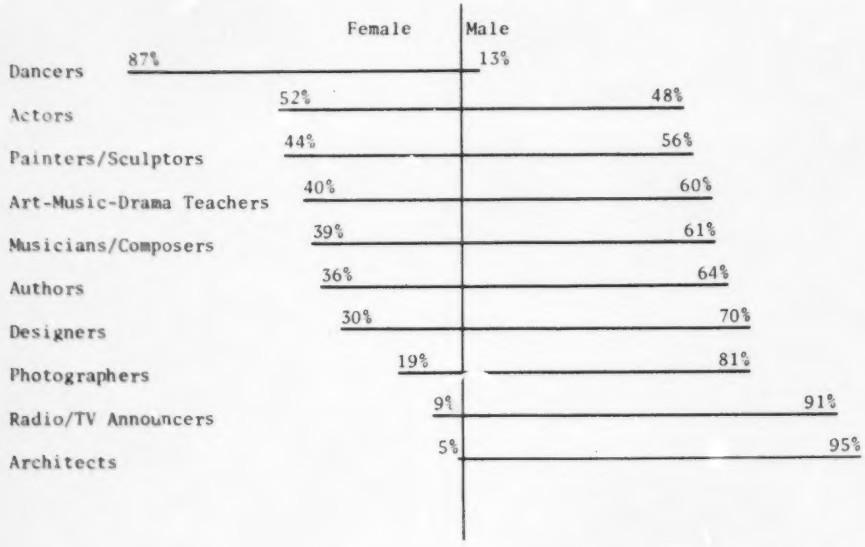


Table 7

EARNINGS GAP BETWEEN ESTABLISHED MEN AND WOMEN ARTISTS AGE 30 AND OVER
WHO WORKED 40 WEEKS OR MORE IN 1969 IN EACH ARTISTIC OCCUPATION, U.S., 1969

	Female Earnings (on the left)	Male Earnings (on the right)	Median Earnings of Women as a Percent of Median Earnings of Men
Architects	10.2	15.1	68
Designers	8.4	12.5	67
Actors	8.0	12.8	63
Authors	7.4	11.9	62
Dancers	7.0	11.5	61
University Art Teachers	7.9	13.4	59
Painter/Sculptor	5.7	11.1	51
Photographers	5.2	10.2	51
Radio/TV Announcers	3.5	11.0	32
Musicians/Composers	2.0	9.1	21
All Artists	5.5	12.0	46

Median Earnings (in thousands): 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

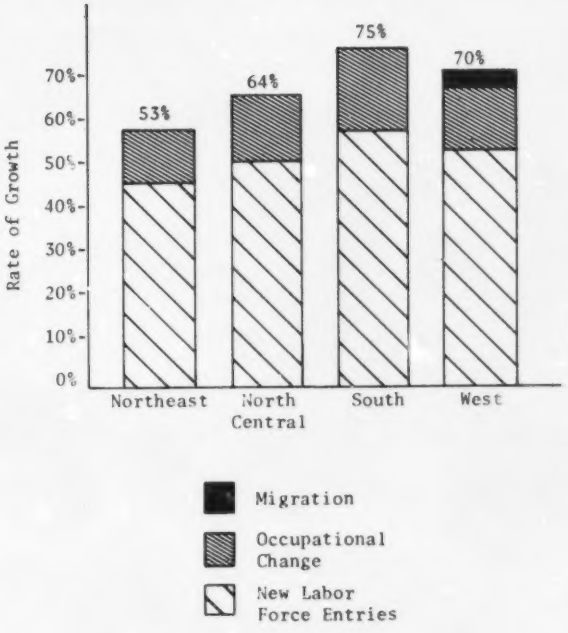
Table 8

STATE RESIDENCE OF EMPLOYED ARTISTS, RANKED BY TOTAL NUMBER, 1970

State	Number	Percent
New York	85,213	15.75
California	79,609	14.71
Illinois	31,211	5.77
Pennsylvania	25,775	4.76
Texas	25,117	4.64
Ohio	23,496	4.34
Michigan	22,454	4.15
New Jersey	22,331	4.13
Florida	18,105	3.34
Massachusetts	17,881	3.31
Maryland	13,338	2.47
Virginia	11,561	2.14
Connecticut	10,510	1.94
Missouri	9,905	1 83
Minnesota	9,543	1.76
Wisconsin	9,400	1.74
Washington	9,066	1.68
Indiana	8,716	1.61
N. Carolina	8,367	1.55
Georgia	8,036	1.49
Tennessee	7,096	1.31
Colorado	6,337	1.17
Louisiana	5,356	.99
Alabama	5,106	.94
Oregon	5,081	.94
Arizona	4,817	.89
Kansas	4,777	.88
Oklahoma	4,698	.87
Kentucky	4,451	.84
Iowa	4,441	.82
Washington, D.C.	3,779	.70
S. Carolina	3,345	.62
Hawaii	2,863	.53
Nebraska	2,699	.50
New Mexico	2,602	.48
Utah	2,488	.46
Mississippi	2,252	.42
Rhode Island	2,219	.41
Nevada	2,207	.41
Arkansas	2,107	.39
W. Virginia	1,802	.33
New Hampshire	1,796	.33
Maine	1,524	.28
Montana	1,251	.23
Delaware	1,221	.23
Idaho	1,201	.22
Vermont	1,152	.21
S. Dakota	840	.16
N. Dakota	733	.14
Wyoming	531	.10
Alaska	513	.09
Total	541,009	100.00

Table 9

IMPACT OF ARTIST MIGRATION ON RATES OF GROWTH OF ARTIST POPULATIONS IN REGIONS OF THE UNITED STATES, 1965 TO 1970



Workshop: The strengths and weaknesses of alternative techniques for studying the artist and craftsman population

Moderated by Elliott W. Galkin, Director, Peabody Conservatory, Peabody Institute of The Johns Hopkins University, this workshop examined issues underlying studies of artists and craftsmen, and provided a forum for the presentation of alternative approaches.

A primary issue concerns the identification of an individual as an artist or craftsman. Self-identification via questionnaires or interviews was rejected due to the fact that many individuals may think of themselves as artists, despite never having produced or sold a piece of art. Conversely, examples were cited in which widely recognized artists failed to identify themselves as such.

An alternative to self-identification is to establish specific criteria which, if met, determine that the respondent is an artist. Discussion focused on whether issues such as training or time spent working in artistic endeavors were more or less important criteria than the quality of the product produced.

At this point, several of the conference's foreign visitors were queried as to how this question was resolved for public policy purposes in their respective countries. Robert Hutchison, Senior Research and Information Officer of the Arts Council of Great Britain, stated that in England a three-part definition was used: (1) Does a person call himself an artist? (2) Is more than 50 percent of his income derived from art? (3) Has he been trained as an artist? John R. Thera, Director of Research and Statistics, Arts and Cultural Branch, Secretary of State, Canada, explained that a four-part definition of an artist was used in his country: (1) Over 50 percent of a person's income must come from art; (2) A majority of the person's time must be spent producing art; (3) The person must be "professional," trained in an artistic discipline; and (4) The person has to be judged by his or her peers to be an artist. (In certain European countries this last was determined by whether the individual belonged to an artists' union.)

Discussion immediately turned to the policy implications of various combinations of these criteria, in that the definition will determine who might benefit from public support. It was noted that in the latest Dictionary of Occupational Titles (Department of Labor, Fourth Edition, 1977) several categories of artists were defined. The 1970 Census asked respondents a series of questions as to their activities in the prior week. Based on these responses, they are given an occupational code. As for refining and improving these codes, Harold Horowitz of the Research Division of the Endowment noted that the Division has been involved in a lengthy process to revise categories prior to the 1980 census. Individual artists present suggested that artists themselves ought to play a role in developing relevant criteria.

Little time remained to touch on other critical issues, in particular, those relating to the type of information that ought to be gathered with respect to artists and craftsmen. Which of their needs are of public concern? For example, should we be concerned about (1) income? (2) employment? (3) working environment? (4) marketplace for goods and services? or (5) training? Assuming, for example, concern for artists' income and employment, we would need to determine present income and employment levels in the various artist occupations. Once available, this information would prompt a number of public policy issues. For example, if income and employment levels vary by artist occupation, it may be appropriate to ask whether there is an "appropriate" level of income or employment for each artist occupation, whether it should be uniform among the artist occupations, or whether it should be above or below the national average for all workers. Additional information in the other areas cited would prompt similar questions.

An assessment of this Conference: Some informal remarks

Joseph Coates

I'd like to make some comments about what I heard and saw during the last three days. My comments are not meant to be critical of the Endowment's research program. In fact, I'm very optimistic about it.

One thing is clear: there is a very real problem of language pollution when researchers are brought into the artistic community. Many of the papers presented at this conference were filled with jargon, cliches, and impenetrables. At a more substantial level, it is important to understand what research is before commenting either on what a research agenda ought to be or the problems that can beset it.

Research helps to organize uncertainty and sometimes actually removes it. It is also a splendid technique for deferring decisions until things cool off or until you get the sounding of what's what. Research helps to build the public interest. It is reportable and transmittable and can help build a constituency by helping to make a point. Research can inform policy by focusing interest where it is appropriate and by suggesting alternate ways of achieving policy objectives. Research is a tie-breaker. It is a great way to settle disputes or establish a strong bias among otherwise intractable parties.

In light of this, let me suggest some of the criteria to be applied when evaluating the success of a research program. The research program must be workable. It's very important to encourage success from the beginning, to take on bite-size pieces that can be wrapped up and delivered. Success engenders success. Use engenders the desire for more use. It is essential to do little things well and in a useful format. Findings should be presented not only in a way that makes you want to know more, but so as to suggest that there are more things that would be worth knowing.

Research can be dangerous in that findings may fly in the face of what everyone knows; and what everyone knows is often the basis for how they allocate their money, their professional careers, and their egos. But it is important to fund dangerous research.

It is also important to realize that a good research program may only obtain 20¢ worth of quality research for each dollar spent; most programs hardly do better than 10¢. In other words, four out of five projects end up being useless. And if you tackle the big problems, you are going to encourage more failure. And there are other risks. Good research is expensive. More importantly, it is subject to being politicized. Knowledge is power; and when you generate knowledge, it will be applied by political forces. In particular, the Federal government is not always either a benign or omniscient friend. Wait until the Occupational, Safety and Health Administration hits the theatre. Information will tend to politicize, tend toward regulation, tend toward control.

Researchers themselves are absolutely impossible to deal with. The business of research is to generate information, to test and compose hypotheses. But researchers do not want to tell you what the information means. They must be made to tell.

Research can invoke the petty fascism that is second nature to the bureaucrat. Research means trouble. Knowledge means difficulties. The heavy hand of bureaucracy and censorship will immediately want to impose itself on good work, work that is uncongenial to established interests. Therefore, it is absolutely essential that the program be ventilated and reviewed. Beware of the expert, the grand old man, the scientist, the establishment, and the bureaucrat. They are not a sufficient base separately and barely a sufficient base together for reviewing work. The program must bring in the artists and the arts community and, at the same time, not be left in the hands of the elite of the art and administrative communities.

But research success is most importantly associated with the delivery of information. The Endowment has an obligation to get information to you not only as an aid to your thinking, but as the basis for informed feedback concerning what the Endowment should or should not offer. Research should be presented in a format that is clear, engaging, and to the point. And it must present the implications of what is being said.

Inevitably, the issue will arise as to whether the Endowment should be doing basic or applied research. I believe that at this stage it should be committed to applied research; research that has a high utility element, and let basic research be handled by others.

Joseph Coates is Assistant to the Director, Office of Technology Assessment, U.S. Congress. This is an edited version of informal remarks made at the close of the conference.

In this regard, I'd like to suggest some of the components that might enter into the Endowment's research agenda and also suggest some of the diversity that might inform this program as it unfolds:

(1) One of the things that is clearly absent is the question of the general system. What is the universe of discourse that we are dealing with? What are the parts, the elements and how are they compatible? Who has force? Who has influence? Where does the money flow? Who controls the information? It is important to develop that system fairly early so that one has a ground plan for what's important in the way of research, as opposed to what is workable as opposed to not worth trying.

(2) The future is now a credible area of investigation. It is important to identify the unfolding trends that will determine what is important five to twenty years from now. Almost every basic factor affecting the future of the arts is outside of your control. And if you're not aware of what those elements are, you will have no opportunity to anticipate, to plan, to compare, or to control. Think of the things that have had the most profound effect on the arts. They are all outside your control; tele-communications, printing, transportation, prosperity, higher levels of education, to take the gross things. Take the more detailed things. The development of the long-playing record was a major influencing interest in classical music. We have to look at trends in the economy, in society, in politics, in demography, and so on. For example, as America turns gray, what will be the effect on the arts?

(3) State of the Art papers need to be expanded and encouraged. These would represent a kind of stock-taking in 20 or 30 areas.

(4) Human factors seem, to me, to be a neglected element that has the potential to strongly influence the creative and performing arts. Let me suggest, for example, that the Russians are already using physiological measures at an early age to pick those who will be trained in ballet and dance simply because it now seems to be established beyond a doubt that there are physiological indicators of the potential of being a first-rate performer. If it takes an institutional and a personal investment of 15 years to train a ballerina, isn't it worthwhile to turn to science?

(5) One of the long-term trends of American government has been to develop indicators--viable and appropriate quantitative data with regard to things that are important. Wouldn't it be marvelous for the Endowment to undertake a program of developing cultural indicators--a social thermometer to take the temperature of the earth with regard to culture. I haven't any idea of what the elements of it are, I doubt if any of you do, but it would be an exciting thing to provide a day-to-day and annual state of the culture message based upon data that run the whole sweep of society.

(6) Unobtrusive measures are a great way of getting data. As the social and psychological element of the program grows, one might find more room for this approach. For example, if you want to know the number of people watching a given exhibit or looking at a painting or a portrait, all you have to do is measure the wear and tear on the linoleum.

(7) The labor of the arts needs to be understood. We've had a long and extended program of private and, to a lesser extent, public grants in the arts. What do we know about the effects of those grants? Wouldn't it be interesting to find out not only whether grants help artists, but also the kind of artists who are helped or hindered? How do grants influence the career pattern? We are now opening and dumping a federal cornucopia and that cornucopia won't care where it hits. Here is an amazing opportunity to direct and focus that money on the basis of historical experience.

(8) The educational elements, the role of education, the promotion of special schools, and the effectiveness of art programs are areas of research that merit extension.

(9) The social psychology needs to be understood. We know virtually nothing, as far as I've been able to determine, about the users, the patrons, the buyers, the purchasers of art.

Let me end by noting that it is important to build a long-term commitment on the part of scholars to a program of arts research; not the kind of in-and-out contract research that we've heard a good bit of in the last three days. It is good. It is useful. I wouldn't demean it. But it is not the limit to what ought to be done.